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WORTH SAVING.

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A HEALTHY DAUGHTER OF TUBER PARENTS



UNTAINTED DAUGHTERS OF LEPER PARENTS.

MISS MARY REED, THE LEPER MISSIONARY TO LEPERS.
SUBATHU LEPER ASYLUM.

[Photos by Author

INDIA'S LEPEERS

HOW TO RID INDIA OF LEPROSY

By

FRANK OLDRIEVE

Kaiser-i-Hind Medal

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MARSHALL BROTHERS LIMITED

LONDON

EDINBURGH

NEW YORK

1924

Printed in Great Britain
by
Hunt, Barnard & Co., Ltd.,
London and Aylesbury.

Dedicated to

the noble band of women and men
who have been, and are, labouring
for the lepers in India, and
especially to the one who has
been, for more than 15 years, a
splendid partner and a trusted
adviser,

My Wife.

PREFACE.

THE purpose of this book is to plead the cause of India's lepers, and, I hope, to convince every reader that a great effort ought to be made to rid that wonderful land of this terrible disease that has afflicted its people for so many centuries. If my readers are convinced that we can rid India of leprosy, may I beg every one of them to translate their conviction into action.

Most of the illustrations are reproductions from photographs taken by me when I was in the service of The Mission to Lepers.

FRANK OLDRIEVE.

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CHAPTER I

THE LEPERS THEMSELVES

INDIA'S lepers ! Yes, it is of some of the people who live in that great, that wonderful, that, in many parts, beautiful country, India, that we write. Though, truly, India is hardly a country ; more of a continent is she, with her 321,000,000 people, her numerous races, her many languages, different customs and separate religions. What a land this is !

She has a wonderful history, with the deeds of her mighty heroes writ large on the records of the centuries. She has a beautiful country with mighty rivers, wide-spreading plains, towering mountains, densely populated cities and innumerable villages. She has a religiously-minded people who are zealous in following their ancient faiths. She has to-day a place of honour in the counsels of the nations, for some of her sons are among the great men of the world. She has all this and yet India has many sorrows, and we write of one of them.

India's LEPERS ! We write of them ; lepers ! What feelings are stirred when we think of them, what pity and sympathy ; or, alas that it is so, what repulsion and loathing ; or, too often in India, what callousness and indifference ; and words do

not come easily when the sufferings and needs of the lepers are to be set forth.

Have there ever been, in all the long centuries, in any land, more sorrowful and to-be-pitied people than the lepers? Smitten with a disease that is itself loathsome; in bodily pain and weakness; disliked, often outcasted, because their presence is not wanted; said by many to be cursed by their own gods; their anguish and sufferings are almost more than they can bear. Listen! the son of a leper grew up and appeared to be free of the disease. He married, but soon afterwards he found, to his dismay, that signs of the disease were present. He was so heart-broken that he went and hanged himself. The tragedy is greater because his father is still alive and is recovering. But what sorrow is there in the lives of such, and it is of these that we write.

Who they are.

They are men, old men who have lived lonely painful lives for ten, twenty and more years; young men who have had to leave their wives and children, their work and their homes; men of all ages. They are women, with the same sorrows as the men, though it surely hurts the mother more than the father to leave the little ones. They are children, yes, there are many leper children. Poor little boys and girls with maimed bodies and such a hopeless look on their faces. Indian children are, on the whole, bright merry mites, with sunny faces and dancing footsteps, but the leper children are not so. Their lives are specially full of sorrow.

There are rich lepers, although one does not see much of them ; as a rule they keep themselves to themselves ; but the majority of lepers are among the poor, and this means that their wants cannot be properly supplied and they suffer more than they need.

There are educated lepers. I know Mr. P——. He was an assistant professor at a College in one of the largest of the cities in India, yet he is a leper. There is K——, who was well educated at a Mission School, sent to a Training College in one of the large cities to be trained as a teacher. She writes good English and knows a good deal, and she is smitten. But, of course, the greater number are among the uneducated, as is the greater proportion of the total population in India. How should they know what leprosy is, and how to guard against contracting it ?

All classes of people become lepers. Recently a Rajah died in the South of India and he had been a leper for many years. It has been the same in other countries in times past, and one cannot wonder that the story of India should be what it is.

Of course the great majority of the lepers in India are Indians ; North, South, East, West one sees them. Many languages they speak, different food they eat, different clothes they wear, but all are brethren in their affliction. They travel up and down the country but, wherever they have come from, they always receive a kindly reception from other lepers.

There are a considerable number of Anglo-Indian lepers to be found in the centres where they, as a

community, congregate. It is difficult to estimate their number as they hide their troubles from outside eyes, but I have come across quite a large number in different parts of India.

There have been a few cases among Europeans but it is quite exceptional to find such. Two or three business people and two or three members of the Indian Medical Service have contracted the disease in the course of their work or the discharge of their duties, and only a few others. There have been two cases of missionaries, one an American, the other a Canadian, who have developed leprosy, the former before she worked among lepers, the latter while doing so.

India's lepers! So many of them there are! The Census of 1921 gave the total number, for the Indian Empire, as 102,513, but most of those who work among lepers consider that this number does not at all represent the actual number of lepers in India. Probably the number ought to be put down at 250,000 at least. Think of what that means!

We will imagine a procession of the lepers in India. They shall march before us, but with what halting steps, some on crutches which they can hardly hold, others crawling along on hands and knees; others, the blind, led by those who can see; we will ask them to pass along at the rate of twelve a minute. On they would come, all types of people, from all parts of India, a sorrowing, suffering, long, long line of the sick. We would sit and watch them pass from sunrise to sunset, twelve hours a day, and day after day we should

have to sit. How many days would it take for the procession to pass? About thirty days at twelve hours a day, and twelve lepers hobbling along every minute of the time. What a sight; a veritable Via Dolorosa! What tragedy would be there, what pathos! The sight, if it were possible to marshal such a procession, would be the most heart-touching that human eye has ever looked upon. It cannot be done, you say! Yea, but remember that, although these poor people cannot be drawn together into one long line, they are moving about India day by day, and the sorrow and suffering is still as great even if it cannot all be seen as imagined.

How they suffer.

Leprosy is essentially a skin disease. It has its own specific organism, the bacillus lepra, which in some way, at present not quite fully understood, enters the body. The disease usually lies latent in the system for a considerable period before any definite symptoms or signs are manifest. How long the incubation period may last is uncertain, but the average is said to be about three to four years. Dr. E. Muir has recently been studying the question of transmission of the disease, and has charted the first lesions noticed by over 1,000 lepers in India. He says that the extensor surfaces were most affected, while the neck, waist, and flexor surfaces were free. The scalp was entirely free. In hilly districts the feet were most infected. The greatest concentration was on the cheeks, probably due to the fact that the patients lay on infected pillows when there was some scratched surface

on their cheeks. Dr. Muir says : " Our conclusions are that lepra bacilli are inoculated through the skin by scratching, irritation being supplied by the bites of insects and various diseases ; that bacilli may be inoculated through the mucous membrane of the nose by scratching, due to the reflex irritation of intestinal parasites ; that bacilli may enter the skin through wounds of the feet and elsewhere."

In India leprosy is spoken of as " the great disease " on account of its hitherto incurability, its protracted course and its loathsomeness.

There are said to be three types of leprosy, skin (commonly called tubercular or nodular) leprosy, nerve or anæsthetic, and mixed, but these are often difficult to diagnose very clearly and the division is somewhat an artificial one. In nerve leprosy the nerves are affected and this results in anæsthesia and loss of movement ; the anæsthetic patches are discoloured. The nerves are often thickened and the loss of feeling may begin in the hands and feet and spread up the arms and legs. This is accompanied by the gradual loss of fingers and toes ; sometimes almost the whole of the hands and feet disappear. The skin may become glazed and there is often an absence of sweating. In skin leprosy there may be an acute attack of the disease, either the first attack or following a slow beginning, and this is accompanied by severe fever and the appearance of nodules, or thickened areas of the skin, which later break down and ulcers are formed. There is general weakness of the whole body and the system is undermined. Sometimes the eyes

are affected and blindness often follows. The nerves and muscles which control the movements of the face are not infrequently attacked and a hideous contraction and contortion of the face is the result. When this is accompanied, as it sometimes is, by the breaking down of nodules, the poor sufferer is very greatly to be pitied. Never shall I forget an educated young Indian writing to me and pathetically saying that his friends would not speak to him as his looks were so terrible, indeed he was only able to go out in the dark.

Not all lepers are an equal source of danger in a community. Thus we consider that the leper is most infective in the earlier stages of the disease, while the advanced anæsthetic cases, where there is severe mutilation accompanied by loss of fingers and toes, and where there may be comparatively few bacilli being given off, are not a very great public danger. Sir Leonard Rogers has said, "The tubercular form of leprosy with extensive nodules producing the leonine appearance of the face, and the discharge of enormous numbers of lepra bacilli from the nose and throat on sneezing and speaking, as well as from ulcerated nodules, is far more infective than the nerve type with little or no discharge of bacilli from the system."

As a disease leprosy is not said to be very contagious, but it is what one would call remotely contagious, and the disease is usually contracted after prolonged association with lepers. It does not seem to be necessary that there should be actual personal contact with a leper for the transmission

of the disease, but usually it follows close intercourse with lepers.

Sir Leonard Rogers has recently dealt at length with the question of the incubation period of leprosy, and his main conclusions are that the average incubation period is three and a half years, and varies between five and a half months and four years. He finds a direct relationship between the closeness of contact with the disease and the earliness of the development of symptoms. The incubation period in a few cases of direct inoculation was under two years, usually about six months ; sleeping with a leper was followed by symptoms in an average of one year and eight months, living in the same house in two years and ten months, and less close association in four years and eleven months.

I think it ought to be clearly stated that there is no real connection between leprosy and syphilis, although, from my own personal experience among lepers in India, many lepers have syphilis and many syphilitics have leprosy. I am inclined to think that the reason for the presence of both diseases in any case is due to the fact that the sufferer's constitution was greatly undermined by one disease, and so he was more open to contract the other disease. It should also be remembered that many begging lepers live in the very worst parts of Indian cities and have to come into touch with many people of the lowest moral character, and it is not surprising that lepers often contract syphilis.

At one time a theory was propounded by Sir Jonathan Hutchinson that leprosy was due to the

eating of fish, but this view is not now accepted by any who are authorities on leprosy.

One who knew the East well wrote :—

“ The night lies dark upon the land,
And we have light ;
So many have to grope their way,
And we have sight ;
Foot-sore, heart weary,
Faint they on their way
Mute in their sorrow . . . ”

and if ever these words were true of any they are true of the lepers. I have lived amongst them, and worked amongst them ; and I have had much to do with sick people in Central Africa as well as in India, but I have never seen any who are more foot-sore or heart weary than these poor people.

In the Old Testament of the Bible it is said, referring to the leper, “ he is unclean,” and we who know them best cannot but feel, sad though it is to have to admit the fact, that it is the truth. Leprosy is a loathsome disease, it is so awful in its physical results. But he would be a strange person who saw no more than the bodily sufferings of the lepers, great as these undoubtedly are.

Think of the heart-break that comes from separation from those most loved. I shall ever remember the note of poignant sorrow in a letter I received some time ago from an Anglo-Indian lady who told me that she had become a leper, and that she must leave her husband and two little boys. What anguish is there in such a case !

There is Mr. D——, a young Anglo-Indian, who was doing well in business, capable, trustworthy,

for whom there was a bright future, but set on one side because a leper.

Come with me to Subathu, 3,000 feet up among the glorious Himalayas. We will stand out on the hill at the end of the ridge and there we shall find a few houses. Here some Anglo-Indian lepers live. Let us visit one house. A call brings a young woman to the verandah, and we enquire, "How are you getting on, Enid?" She has been there a few months only, having come up from Calcutta. She tells us of her new home, and how comfortable she is, and then there is a sudden break in the voice, a break we shall never forget, and the eyes fill with tears, as she falters, "Oh, Mr. Oldrieve, they tell me I am going blind." The voice-break tells of the heart-break, and I do not wonder, and our eyes fill with tears in sympathy.

The wonderful hills are around us, glorious views of Himalayan snows stretch out to the North, and the lovely valleys, with their green terraced fields and gardens, are below us, and it is a beautiful picture. And Enid fears that, as the disease has attacked her eyes, all this glory will soon be blotted out for her. I do not wonder that there is a break in her voice as she tells us. Here is a loss that is too great for words, and tears alone will tell of the anguish.

Tragedy and pathos! In the life of every leper they have, in some degree, a place. But there is even more than all this in the lives of many Indian lepers. For many Hindus say that the leper is suffering in this life the penalty for sins committed in a former birth. The gods have cursed him with

this disease, and he who has no hope in his own religion, whatever it is, must be utterly inconsolable. A leper inmate was asked what his religion was and he pathetically replied "I was once a Brahmin." Oh! the pang that must have entered into this poor man's soul to know that although he had been born into the thrice blessed state he had lost his inheritance. Cursed by the gods! There is no more awful fate that can overtake a devout Hindu, and this is what comes to many lepers.

Truly it has been said that,

"In all the long procession of the ages there is no more truly tragic figure than that of the leper. Inspired both by traditional association and by natural horror, men have shrunk from him as a creature cut off from all the interests of healthy humanity. His cup is full to the brim with bitterness, and includes in it every ingredient of sorrow. Disease both loathsome and lifelong; expulsion alike from home and city; forfeiture of social and legal rights; all these, together with the consciousness that he is an outcast and that life holds for him no hope, combine to make the lot of the leper the very quintessence of misery and despair. Indeed, the very word has become the synonym for all that is foul and repulsive."

There is this to be said, that the Indian leper of to-day is fortunate that conditions are not now what they were one hundred, or less, years ago. William Carey records, in one of his letters, that when he was at Kutwa in 1812 he saw the burning of a leper which he thus described:—

"A pit about ten cubits in depth was dug and a fire placed at the bottom of it. The poor man rolled himself

into it ; but instantly, on feeling the fire, begged to be taken out, and struggled hard for that purpose. His mother and sister, however, thrust him in again ; and thus a man, who to all appearance might have survived several years, was cruelly burned to death. I find that the practice is not uncommon in these parts. Taught that a violent end purifies the body and ensures transmigration into a healthy new existence, while natural death results in four successive births, and a fifth as a leper again, the leper, like the even more wretched widow, has always courted suicide."

While as late as the year 1846, at the close of the Punjab Campaign, Mr. R. N. Cust was placed in charge of a newly-conquered district as Magistrate. Summoning the head men of the villages to Hoshyarpur, he explained to them the principles on which they would be governed, and, as he afterwards related,

" I ended my speech by saying in a loud voice : Listen to my three new commandments :—

1. Thou shalt not burn thy widows.
2. Thou shalt not kill thy daughters.
3. Thou shalt not bury alive thy lepers.

" This is due to a superstitious belief, still prevalent in some parts of India, that if a leper suffers himself to be buried alive the disease will not descend to his children."

An instance of this hideous practice occurred in the United Provinces only some 20 years ago. The wife of a gardener was stricken with leprosy. In order, as she thought, to save her children, she begged her husband to bury her alive. At length he yielded to her request, and, together with his son, dug the grave. In the presence of four neighbours the poor victim to a barbarous

belief was thus sacrificed. The facts in this case were substantially proved in the course of a magisterial investigation.

In one or two other countries the leper is treated in an almost inhuman manner even to-day, notably in China, but, although systematic cruelty is a thing of the past in India, it must be admitted that the lot of the ordinary poor person who becomes a leper is one that must stir the sympathy of all who have been brought up in the West. The lepers suffer very greatly and in many ways.

Where they live.

They live almost everywhere in India, indeed there is hardly any part of India where some lepers cannot be found, though there are more in some districts than others.

“ They are waiting everywhere
Where the fields of earth are fair,
Where the rivers nobly run,
Where the blossoms seek the sun,
Where the hills rise, high and grand,
Looking proudly o’er the land,
They are waiting !

They are waiting in the wild,
Sick and dreary and defiled ” ;

and this is terribly true of the leper.

Considerable numbers of lepers, as I have said, are found in all parts of India, and the detailed figures, taken from the Census of 1921, and comparing these with the figures of the 1911 Census, are given overleaf.

INDIA'S LEPERS

LEPERS IN THE INDIAN EMPIRE.

Provinces, Etc.	Number of Lepers 1911 Census.	Number of Lepers 1921 Census.	Increase or Decrease.
Bengal	17,485	15,897	-1,588
Bihar and Orissa ..	16,935	12,269	-4,666
Madras	16,648	15,753	- 895
United Provinces ..	14,520	12,649	-1,871
Bombay	10,303	9,707	- 596
Central Provinces ..	7,307	8,025	+ 718
Burma	7,038	9,765	+2,727
Assam	4,372	4,464	+ 92
Punjab	3,091	2,737	- 354
Central India Agency	1,288	949	- 339
Rajputana Agency ..	650	405	- 245
NW. Frontier Province	282	211	- 71
Others	435	172	- —
<i>Native States :</i>			
Baroda	445	552	+ 107
Gwalior	—	418	—
Hyderabad	3,758	4,214	+ 456
Kashmir	1,352	1,485	+ 133
Cochin	—	466	—
Travancore	—	2,058	—
Mysore	767	314	- 453
Sikkim	24	11	- 13
Others	2,394	—	—
Totals	109,094	102,513	- 6,581

Sir Leonard Rogers has for some time been studying the question of the incidence of leprosy in the world, and his conclusions were based upon figures relating to India as well as on those from other parts, and his conclusion is that leprosy is more

prevalent in a hot, humid climate than in any other, and he says :

“ I suggest that the abundance of insect life, combined with the favouring effects of warmth and moisture on the extracorporeal life of the lepra bacillus and on the frequency of abrasions of the skin, will best account for the exceptionally high incidence of leprosy in humid tropical countries.”

Personally I have met lepers in every part of India, and the existence of homes for lepers, in every Province and large Native State, confirms the fact that lepers are living there, for a home would not be started in a Province or State for lepers coming from elsewhere. They are to be seen at the Melas, outside the temples ; near the markets, too often in them ; by the roadside where numbers of people pass from whom they can beg, indeed everywhere.

It is not to be wondered at, considering they are so little cared for by their own friends, as is too often the case when they come from poor homes, that the lepers congregate wherever large numbers of people are to be found ; and especially is this so in the cities. A census of lepers was taken in the city of Calcutta about two years ago, and it was then found that there were some 1,100 pauper and begging lepers living among the healthy population in the very heart of the native part of that great city, the second city in the British Empire. They were found to be living in several quite large colonies, two of them each having some 300 lepers, and there were smaller centres in other directions. One of the saddest sights I have seen for some time was a Christmas dinner for Calcutta beggar lepers in December, 1922. The misery and

hopelessness of the sad, ragged crowd of perhaps 300 men, women and children, moved the hearts of all who were present as onlookers.

In Bombay, the third largest city in the British Empire, there are said to be several hundred begging lepers, and the same may be said of Madras, though the number there would not, of course, be so large. But they may be found in considerable numbers in every large city in India.

Some 9,000 lepers live in the various leper asylums in India, but this represents less than four per cent. of the estimated total number in the country, and probably not more than one sixth of the number of pauper and begging lepers to be found. Verily a pitifully small proportion when one remembers their sufferings and their needs.

On the whole, it is probable that leprosy is not spreading to any extent in India, but there are instances where it certainly has done so. The late Mr. J. Vas, I.C.S., Collector of Bankura, Bengal, wrote in 1920 :—

“ At the census of 1911, the incidence of leprosy in the district was found to be 23 in 10,000 ; that is, the number of helpers was 2,617. In comparison with the figures of the two previous censuses there was a slight decrease. You may be aware that the district was visited last year by a severe famine and relief operations on an extensive scale were undertaken. It was found that a large proportion of those who had to be relieved gratuitously were lepers, and in a census taken by my relief officers as many as 4,698 were enumerated. This estimate errs, if at all, on the side of understatement. But if this figure is accepted there has been an increase of 75 per cent. in nine years. This is truly an appalling state of affairs. The increase may be attributed to some extent to the hardship

inflicted during the last decade by famine and by war prices on a population already predisposed to infection by poverty and a low standard of living. The main cause, in my opinion, is the unrestricted intercourse that is permitted to lepers in the district."

About the same time I visited a village in the Madras Presidency, where, after careful enquiry, I was told by the old men present that 30 years ago there was only one case of leprosy in the village, and when we were there there were some 70 cases. In two or three other parts of India I have had clear evidence placed before me that in quite a number of villages there had been a very marked increase in the number of lepers during the past 10 or 15 years. While climate, as has been pointed out by Sir Leonard Rogers, has some effect on the incidence of leprosy, it is most certain that social conditions have a great deal to do with the spread of the disease. Its prevalence in any given place seems to be in some way bound up with uncleanly habits, squalor, dirt and poverty, not, let it be noted, that the disease is caused by these things, but is associated with their presence. In the case of the village referred to above there were just these insanitary and unhealthy conditions to be seen. The houses were closely huddled together, there was no proper ventilation, no drainage, and the people themselves were not well nourished.

What they do.

Many of the lepers live at home, sharing the house with healthy relatives; eating from the common food dish, sleeping in the same bed with

wife or child, using the village water supply, rubbing shoulders with neighbours in daily intercourse. They do their share of work in the fields, using the same humble agricultural implements as those who are not lepers ; cooking the food for the family, doing anything and everything else that the others do. Thus thousands of lepers live in India.

A lady doctor, who had had an extensive practice among Indian women in a certain large city in North India, assured me that in the zenanas there were often leper women to be met, kept hidden away lest others should know the shame that had come to the family, that there was a cursed one in the home. Who cared what became of them, how much they suffered, if only it could be hidden ?

In the cities the lepers beg for a living. In Calcutta, for instance, they may be seen at almost any time of the day on the main thoroughfares frequented by Europeans and Indians. There are, so it was stated in the Bengal Provincial Council not long ago, wealthy men called " sirdars " who import into Calcutta some of the worst cases they can find and employ them at so much a month, providing them with a hovel in which to live, and I have seen many of their sleeping places, and they are not fit for human beings, let alone for sick, suffering people. The employer then takes what the beggar leper receives from the public and the men thus batten on the sufferings of their fellow-countrymen. I have seen lepers sitting at the side of D—— Street in the middle of the pavement, where almost everyone who passes must touch

them with their clothes, holding up their poor stumps of hands and feet, often covered with great open ulcers, in appeal. I have seen them sitting outside the New Market in Calcutta, where the provisions for many of the Europeans and Indians are purchased. Others have seen them inside, dragging their deformed bodies in and out among the goods and foodstuffs on show on the stalls.

I have seen them standing, their hands covered with festering sores, holding on to the tram in which we travel. I have seen them sitting on the steps of a certain building in Calcutta where the children of Europeans are taken in the evening to play. They wander where they like, but almost always where most people are to be found. When it is remembered that leprosy is a contagious disease, that a leper often gives out in his breath the causative germ, it will be understood that the beggar leper is a menace to the healthy population of every town where he is found.

An Indian Doctor told me of the following cases, for every one of which he could vouch :—

A leper man working at washing dishes at S— Refreshment Room on a railway. This man brought a glass of drinking water to the doctor.

A man carried water for use in the house, in a lady missionary's house. He used to bath the doctor referred to, when the doctor was a little boy. He washed the dishes used in the house.

A man who prepared the oil used for curries.

A vegetable seller at R—.

A sweet-maker at R—.

A Sub-Assistant Surgeon who was on duty at a hospital while he was a leper.

A cloth merchant in a large village.

A baker in C——.

A cigarette-maker, a man, and his wife, also a leper.

A stitcher of the leaves in which food is wrapped.

A woman milk seller at C——, in 1914.

Another woman milk seller (1917).

Another preparer of oil for curry at R—— in 1919.

The cart driver of H.H. the Rajah of ——, in 1915.

The cart driver's son.

A ghee merchant's wife, near R——.

All these cases are from one small District, and almost everyone in India knows of similar cases.

According to the 1921 Indian Census, lepers in the Madras Presidency were working at the following :—General shopkeepers (180); grain and pulse merchants (82); grocers (52); tobacco sellers (47); fish dealers (13); rice pounders (12); vegetable and fruit sellers (11); milk, butter or egg dealers (9); butchers (5); bakers (3); hotel keepers (3); sweetmeat sellers (2).

These are a few of the occupations, and remember that the lepers who worked thus were put down in the Census as lepers. How many more are working at such occupations and were not put down it is not easy to say, but I do venture to think that this is not the major proportion of the total number, for many lepers do their best to hide the fact that they are lepers.

I was told by a young Indian of good standing

in Bankura recently that he himself knew of lepers who were following these occupations : Confectioner, tailor, cart driver, rice seller, vegetable seller, fish vendor, betel leaf seller (of all things !) ; while constantly they were allowed to go to wedding feasts and bathe in the tanks used by healthy people. It is quite certain that the same applies in other places.

These, then, are the people—India's lepers ! There they live, thus they suffer, so they work, a suffering, sorrowful, sad people.

“ ‘Unclean ! Unclean ! ’ and as that cry rang out
Men moved aside to let the leper pass,
In dread of contact. So he went his way
Outcast from human pity, human love,
From intercourse with all his heart held dear,
From all the closest ties of human life ;
So vile a thing, that even his own door,
By kindred hands that once had clasped his own,
Was closed against his face for evermore.
With not one ray of hope to light the gloom,
Maimed, helpless, as the fell disease crept on
With broken heart he waited for the end—
That end so slow in coming—blessed death ! ”

Alas, it has usually been so, and the leper's life has been full of tragedy. To be sick is an unhappy lot for any person ; to forfeit social rights is a great hardship ; to be turned out of home and village is an added burden ; but to be told that the gods' curse rests upon the victim of such a disease is the worst evil of all. Even added to this there has always been the utter hopelessness of any fight he might try to wage against the disease, itself incurable ! What a fate ! And this is the fate

that has faced multitudes of people, perhaps 500,000 in India.

But yet, the day of hope has dawned for the leper ! Oh, glorious dawn ! Oh, welcome message ! Oh, wondrous hope ! for it is true to-day " The lepers are cleansed."

CHAPTER II

THE LEPERS' CHILDREN

Leprosy is not hereditary.

IT is a striking fact, but nevertheless vouched for by the best medical opinion, that leprosy is not hereditary. In the report of the Commissioners of the National Leprosy Fund, published in 1889, we find two sentences :—

“ No authentic congenital case has ever been put on record, nor was one seen in this country (India).

“ The facts obtained from the Orphanage at the Almora Asylum disprove the existence of a specific hereditary predisposition,”

and the view expressed in the report that leprosy is not hereditary, has been confirmed by all the Conferences on leprosy that have been held since that date. Although both father and mother may be in quite advanced stage of the disease, as I know from my own personal experience among lepers, any child born to them will be quite healthy at birth. I well remember a case at Sabathu, where I was in charge of the leper asylum in 1911, in which the mother had no fingers or toes left on either hand or foot, the father's hands and feet were in an ulcerated condition, but the baby that was born was quite healthy and has, moreover, grown up healthy. Indeed, I saw this child, when 11 years of age, and she was a fine healthy girl.

The common idea that lepers cannot have any

children is not correct. Accurate figures have been published by the American Government dealing with the birth-rate at Molokai, the leper settlement for the Hawaiian Islands. In this case it is shown that over a period of 13 years, 1900 to 1912, the average birth-rate was 19·26 per 1,000 adult married lepers, the total number dealt with being 11,056, and the births being 213. The figures are interesting :—

Both parents lepers.	Birth-rate per	1,000 = 17·38
Mother leper, Father not.	do.	1,000 = 47·49
Father leper, Mother not.	do.	1,000 = 16·09

The conclusion arrived at, comparing these figures with those of healthy natives of the Islands, is that the birth-rate in the leper settlement is about two-thirds as high as that for the non-leprous population. This fact then emerges, that it must be expected that children will be born to lepers living together. Later on, as the disease progresses, sterility is produced in most cases.

But of the children born at Molokai over 100 were taken away from their parents when young and brought up in a Home at Honolulu and not a single girl developed the disease, and only one boy.

Leper Children.

While all that has been written above is beyond question, it is also sadly true that there are thousands of leper children to be found in all parts of India. In The Mission to Lepers' asylums there are between 400 and 500 of these greatly-to-be-pitied boys and girls. A few of these will be seen in the photograph facing this page. They



TYPICAL WARD, TO ACCOMMODATE 12 LEPERS

Photo by Author



BOY AND GIRL LEPERS.

Photo by Author

may be seen by the score in the leper colonies in Calcutta City, indeed wherever lepers congregate.

They are all born free of the disease, but all doctors agree that young children are specially susceptible to contagion. As a matter of fact it is said that 10 per cent. of all the children of lepers become lepers. Sir Leonard Rogers has written :—

“ In studying the statistics of leprosy I have been struck by the exceptional frequency of the development of the disease in the second decade of life, indicating an especial susceptibility to the disease at that period.”

After quoting figures taken from the records of the Molokai Leper Settlement, he says :—

“ We conclude that nearly all the lepers apprehended up to the age of thirty were actually infected before they completed their twentieth year. These amount to 65 per cent., or practically two-thirds of the whole. Thus I arrive at the conclusion that children and young adults are especially susceptible to the disease, and ought, therefore, to be especially guarded against exposure to infection.”

Leprosy is contagious only, and when the children of lepers are left to live with their parents, or when healthy children, whose parents are not lepers, are allowed to live with lepers, they are very likely to contract the disease. These little children, smitten with this terrible disease, make one's heart ache, when it is realized that they need not have been lepers. I shall not soon forget seeing, quite recently, two boys at one of the leper asylums in India, both of them nice lads of about twelve years of age, but, oh, so maimed and sick. Their faces were so marred, and humanly speaking it need not have been so. It seems such waste !

Many children whose parents are quite healthy

she called it "Fairy Land," and she was the chief of them all, leading them in their lessons and play, teaching them to sing and recite. She herself spoke excellent English, and I shall never forget having a talk with her one evening when I was visiting the Home where she lived. Her smile was one I shall never forget, and she was generally so brave. I remember an entertainment which these "Fairies" gave for me; I recollect how well K—— recited in English, and how wonderfully the little girls, all early cases of leprosy, of course, sang an English song. They knew no English but they had memorized the sounds and K—— was so very delighted that they did so well.

All the days were not the same, however, and K—— used to get very depressed. Her father passed away and she felt that keenly. Her mother was allowed to come and stay with the "dear Mother" and spend her time with K——, but when she had to return home K—— missed her greatly and became very unsettled. Everything was done to help her, but she could not settle down again. She longed to go to one of her sisters and at last permission had to be given. She stayed there for some time and then she went right down to the South of India to Travancore to a home at N——. When I visited this Home in 1920, K—— was there and she seemed more settled and was again proving helpful to the others. But, alas, her illness and her sorrows were preying on her mind, and she returned to Madras. Later she went to D——, where a very clever lady Doctor did all she possibly could to lift the burden that was

weighing down this poor girl. But it was of no avail and K—— could not be allowed to remain as she broke all the rules and behaved so peculiarly. When I was in Madras in December, 1922, I visited the Government Leper Asylum, and was shocked to find K—— living in a little room by herself. They said she was not right in her mind, and from my own conversation with her I fear there was some truth in it. The last news is that K—— became so strange that the medical authorities had to send her to an Asylum for the insane.

What a tragic story ! And this is what came to K—— because she was a leper. We can little imagine the anguish she suffered, the misery she endured, the tears she shed before her mind became unhinged.

Reader, remember that this is the story of only one broken life, and there are thousands, yes thousands, of children in India who suffer as she did. Imagine what it must be for a child of refined mind, with a beautiful body, palpitating with life, longing for love, to find the fatal patch or spot ! She sees around her the marred, battered, deformed wrecks of humanity—the lepers—and knows that she will become like them. Imagine the shudder that passes through her ! I have myself often shuddered to look at some lepers. What if I had anticipated becoming, through a long-drawn-out agony, like them ?

The sufferings of the leper are more than physical I can assure you, and I think that the child lepers must suffer most of all.

Of course, in the asylums where these children

live, everything that can be done for them is done. There are school classes for them, and games, and all that is possible in the way of treatment, but the fact still remains that they are lepers, and some of them may never recover. Those outside the asylums have nothing done for them at all. Who cares that this or that child has leprosy? It is fate, the curse of the gods! Let it be, we cannot help it!

The untainted children.

But, as we have said, a considerable number of the children of leper parents grow up healthy. Whether it is that they have the disease in a very mild form when they are very young, and develop a kind of immunity, we do not know, but the fact remains, and it is much to be thankful for. And this sometimes happens in families where there are lepers for whom nothing is being done. A splendid story has to be told when we come to consider what active steps are and can be taken to save these children of lepers from becoming lepers.

There are some interesting and instructive figures dealing with this side of The Mission to Lepers' work in India. Dr. Muir, in "A Handbook on Leprosy," page 91, says:—

"In a report of the Nasik Leper asylum, of 44 children rescued and placed in the Lady Polwarth Home, which is situated over 2 miles from the asylum, 34 have passed out untainted, 8 have married, and their children are perfectly healthy, as are also the 10 remaining in the home. In the home connected with the Ramchandrapuram Asylum, of 40 children only 3 contracted the disease; 2 of these had long lived with their leprous fathers before being

admitted to the home, and the third 'had not lived with her father for many years.' It will thus be seen that, while with early isolation the danger is small, there is a strong tendency for children to contract the disease from their parents, if not separated from them as soon as possible, preferably at birth."

For many years The Mission to Lepers has taken a leading part, indeed, almost the only part, in India, in saving these children. Homes have been established by this Mission in connection with its principal institutions, and here these children are cared for by themselves. They are carefully watched as to general health, for some of them are not strong, and fed with the right kind of food to build them up. They are given a simple education and, when old enough, are taught some kind of work, such as carpentry, basket-making, building or gardening for the boys, and needlework and other suitable employment for the girls. Opposite the title-page is a photograph of four untainted girls learning needlework. They are thus fitted to go out and take their place in the community as useful members of Society, and well they do this. Those of them that show an aptitude for study are sent to a High School and College, and become teachers or compounders, or enter some other calling.

When I was last in India I was more than ever impressed by this side of the work done by The Mission to Lepers. I wish my readers could have seen some of the beautiful children who were in Homes I visited. Almost all of them were the sons or daughters of Lepers. I took photographs of some, and our frontispiece shows a child, a daughter of leper parents, who has been saved from becoming a leper.

For instance, at Ramachandrapuram, Mrs. Joshee, who has for a number of years been in charge of the Untainted Children's Home, says that in the twenty-three years of work amongst these children, home and education has been given to 43 children, and only three of these have developed the disease. The others have all gone out to live useful lives, and in her report I read the following : " One young man is now a good carpenter, trained in a Mission Industrial School, the next a Government certificated compounder who is doing splendid work, another is a school teacher, and is also learning compounding, while another is a gardener."

Of the girls, some have been trained for teachers and nurses, while the majority, of course, have married. Mrs. Joshee notes the fact that all of those who have children find that the little ones are quite as healthy as ordinary Indian children.

Good work has also been done by Mrs. Guilford at the Home for Untainted Children at Tarn Taran. Here Mrs. Guilford made a special study of their needs and has been most successful in bringing the little ones up, ably seconded by Mrs. Das, the wife of the Doctor to the leper asylum. The same kind of work, on a considerable scale, has been done at Naini, Allahabad, by Mrs. Higginbottom, at Chandkuri, by Mr. W. H. P. Anderson, and those who have followed him, at Purulia by Mrs. Cannon, at Champa by Mrs. Penner, at Dhamtari by those in charge, and at Nasik by Miss R. Harvey. The Provincial Governments in India have recently, in response to representations which I made to them, realized the great value of this work, and

are helping in a small way to finance it. The children in the Homes are allowed to see their leper parents occasionally, and because of this the parents are often persuaded, when they enter the asylum, to allow the children to go to the home and thus be kept away from contact with lepers.

Quite a number of children who have been trained in these Homes have, when grown up, returned as workers in the leper asylum, thus showing in a very practical way their appreciation of what has been done for them, and their realization of the need of those who are suffering from the disease from which they have been saved.

The experience of Miss Harvey at Nasik has been shared by a number of other workers amongst lepers, who have had the care of these untainted children. In a considerable number of cases untainted children of leper parents have married other untainted children, and in every case the children born to them were quite healthy, and remained so. They were not, as far as I have ever heard, weakly children, but quite ordinary in every way, and I have seen a number of these cases in various parts of India. There does not seem to be any inherited predisposition to contract leprosy or any specially inherited weakness of constitution. This is, of course, a most encouraging fact, and is one of the reasons why some workers amongst lepers are not averse to the married lepers being allowed to live together, if only any children that are born can be taken away at an early age and kept from contact with lepers.

CHAPTER III

THE LEPERS' FRIENDS

THE warmest friends, and greatest helpers, of the lepers in India have always been Christian Missionaries.

As Giovanni Papini graphically says,

“ When along the roads that are made to be travelled by the strong, the lepers come towards Jesus in groups of 10 or 12—the repulsive, disfigured, horrible lepers—and He sees beneath their miserable rags those livid scaly swellings, that cracked, bruised and mottled flesh, that stiff and wrinkled skin, the twisted mouths, streaming eyes and swelled hands ; when He looks upon those unhappy, suffering phantoms, whom all avoid, who are separated from all, who are disgusting to all, who may deem themselves fortunate if they have a crust and a cup of water, and some filthy hovel wherein to hide ; whose swelled and blistered lips can hardly enunciate the words they would fain utter ; those beings who beseech Him whom they know to be strong in word and deed, Him their last hope in their utter misery, to heal them, to make them clean, and perform a miracle, how can Jesus flee from them as others do, and turn a deaf ear to their pleadings ? ”

Impelled by the example of Christ who Himself touched and healed lepers during His earthly ministry, as well as obedient to His distinct command to “ Cleanse the lepers,” and remembering that the lepers were the only particular class of sick people about whom our Lord gave a specific command,

and, further, having their sympathies stirred by what they saw of the condition and needs of the large number of lepers whom they met in the course of their ordinary missionary work, the missionaries have always been ready to do what they could to serve these most needy of all the sick people whom they saw.

The greatest and best known of all the friends of the lepers, not only of those in India, but of all lepers in all parts of the world, is Mr. Wellesley C. Bailey. This Irish gentleman was working as educational missionary with the American Presbyterian Mission in the Punjab in the year 1871. He was stationed at Ambala where a small colony of lepers lived quite near to the Mission House. Becoming interested in them he tried to help them. On returning home for furlough he spoke to friends of their needs, and later a Committee was formed, and The Mission to Lepers came into existence in the year 1874. The wonderful enthusiasm of this great-hearted, and far-seeing, Christian man is almost entirely responsible for the magnificent work which is being carried on to-day among lepers in twelve different countries of the world.

For nearly fifty years Mr. Bailey was ably seconded by his wife, who travelled all over the world with him in the interests of the lepers, pleading their cause with a pathos that touched every heart, giving her time and strength unstintingly for the people whom she so greatly loved. Mrs. Bailey was one of the most beautiful Christian characters it has ever been the writer's privilege to meet, and he, with a host of others, to-day mourns the loss

of this gifted lady. It is no exaggeration to say that the lepers of the world owe more to Mr. and Mrs. Wellesley C. Bailey than to any others.

The Mission to Lepers' work in India.

Most of the work among lepers in India to-day is done under the auspices of The Mission to Lepers. This international and interdenominational Mission provides funds for the purchase of sites, the erection of buildings, and the maintenance of lepers all over India. The asylums remain the property of The Mission to Lepers, but the work is supervised by the missionaries of the Protestant Missionary Society working in that particular district. The Superintendents, sometimes men, at times women, British, Canadian, American, Australian, New Zealand, Swiss, Danish or Indian, are all honorary workers as far as the leper work is concerned, receiving no salary from The Mission to Lepers for their self-sacrificing work. Theirs is a labour of love and The Mission to Lepers, the Indian public, and the Government, owe a deep debt of gratitude to these splendid men and women.

In the Mission's own asylums the lepers live in small houses, each of which has, generally speaking, three rooms. A typical ward, which would accommodate twelve lepers, is shown on the page facing page 32. There is good ventilation given by windows and doors and there is a verandah in front. In some asylums the cooking is done by the individual lepers, in which case there is a back verandah which is partly closed in and forms the kitchen. In other institutions the cooking is done in a central

kitchen, or kitchens. In almost all asylums the lepers receive their food supplies once a week, and part of this is a small sum of money with which they are able to go to the asylum store and purchase the little etceteras which they particularly like to have.

It is good for the lepers to have some occupation, and so gardens are divided off and seeds supplied that vegetables and flowers and fruit may be grown. This has been done most successfully at the Naini asylum, under the expert advice of the Honorary Superintendent, Professor Sam Higginbottom. At the Purulia Leper Asylum there are quite extensive rice fields, where good crops are grown for the use of the lepers themselves. The women lepers are seen working in the rice fields (facing page 48). On differing scales this is done at every asylum.

In most leper asylums where the inmates are voluntary, all are expected to do some kind of work, and now that so many lepers are in much better health than they used to be, owing to the new medical treatment that is given, a good deal more may be expected from them, and, from all that I have seen, the lepers are quite ready to do their share of work. In most cases they help keep the roads tidy, they look after their own houses, and those who are in better health than others are willing to do what they can to aid those who are not able to do much for themselves.

The question of providing work for lepers is a somewhat difficult one, as it can be readily understood that it would not be quite suitable to propose that the lepers should usually make articles that

might be sold and used by healthy people outside the asylum. All that they can do is to supply their own needs, and as the institutions are enlarged, and more land is taken, it is to be expected that the lepers will be able to do more and more for themselves, and in this way the cost of maintaining the institutions may be expected to become less.

In the Mission's asylums it is the general rule that the men shall live together in one part, and the women in another part. This usually works out quite well and the inmates are on the whole very contented.

In addition to its own leper asylums The Mission to Lepers gives financial grants to other institutions which are managed by missionaries, but which do not belong to the Mission itself. Further, the Mission provides Christian teaching in other leper asylums which belong to Government, to Municipalities, or to Native States. In these various ways The Mission to Lepers ministers to some 7,500 lepers in India.

Most of the largest asylums in India belong to The Mission to Lepers. They are the most economically managed and, on the whole, the most successful. The Superintendent is a Christian missionary, the staff, almost entirely Indian, is Christian, and the whole atmosphere is Christian. There is, however, no compulsion in attendance at religious teaching, every leper being free to attend, or not, as he wishes. The majority, of course, do attend, and, taking the Mission's own asylums into account, about 67 per cent. of the inmates become baptized Christians. In the asylums which are

aided by the Mission, about 54 per cent. become Christian, and in other institutions in which the Mission provides Christian teaching only, having nothing to do with the management, 30 per cent. become Christian. From the Missionary standpoint, therefore, the Mission's own asylums are wonderfully successful, and when it is remembered that there is really no compulsion used even in attendance at services, it is a striking proof of the appeal which the Christian Message makes to those who are in great need, both of soul and body.

In 1920 The Mission to Lepers arranged for a Conference of Leper Asylum Superintendents and others on "The Leper Problem in India." This was held in Calcutta and was very successful and important findings were adopted on the closing day. These will be found in Appendix C. The result of this Conference, which was well reported in the press, was that public attention was drawn to the problem of the lepers and much interest was stirred. In this way The Mission to Lepers has proved itself a real friend to the lepers of India.

What Government is doing for Lepers.

The care of the sick is a matter for the Provincial Governments in India, that is, so far as the actual provision of money for doing the work is concerned. The Government of India legislates for the whole country and supervises, but the work itself is in the hands of provincial officials, British and Indian. Under the Montagu-Chelmsford Reform Scheme medical work is a transferred subject and is now in the department of an Indian Minister. All of

these Ministers are keenly alive to the needs of the situation as regards work for lepers.

For many years the Provincial Governments have made grants of money, at so much per leper inmate, to the asylums in its area, for maintenance and, in addition, substantial grants of money for new buildings.

The Punjab Government heads the list, as far as the amount of grant per leper is concerned. Indeed this Provincial Government practically pays the total cost of the leper work in its area, while allowing quite a free hand, as far as management is concerned, to those actually in charge of the Homes for the lepers.

I believe that the following figures are correct, but full details are not to hand as I write :—

Grant per leper per mensem.			
	Rs. as.		s. d.
Punjab Government ..	11	0	14 8
U. P. Government ..	6	0	8 0
Bombay Government ..	5	0	6 8
Madras Government..	4	8	6 0
Bengal Government ..	4	0	5 4
Behar and O. Government ..	3	8	4 8
C. P. Government ..	3	0	4 0

and some Provincial Governments now give special allowances for medical treatment, thus materially increasing the total grants made. Grants of land have also been made in some cases when a new asylum was to be built.

There are no really Government leper asylums in India. Those in Calcutta, Madras and Bombay are largely municipal, though financed liberally by Government. That at Bombay is, in some ways

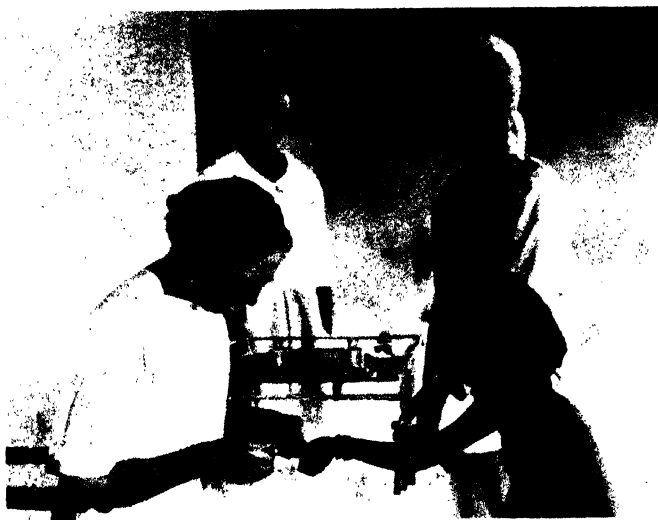


Photo by Author
DR. ISABEL KERR GIVING AN INJECTION TO A LEPER GIRL.



Photo by Author
LEPER WOMEN WORKING IN RICE FIELDS.

considered, the best equipped and nicest-looking asylum in the country, but, of course, large sums of money have been spent on it from time to time, and there has all along been a good local Committee which has taken a really live interest in the institution.

In 1919 The Mission to Lepers approached the Government of India with a request that the existing Lepers Act (of 1898) should be so amended that it could be put into operation by the Provincial Governments. As it was then worded it was of no practical value whatever. This request was favourably considered, and in 1920 the Amended Lepers Act was passed. All the Provincial Governments are in favour of putting this Act into force as soon as money is available for the provision of the Asylums, or settlements, which will be needed to house the pauper and begging lepers who will come within the scope of the Act. (This Act is given in full in Appendix A.)

Most of the Provincial Governments now have schemes before them for providing large Leper Settlements or Farm Colonies for pauper and begging lepers who will be compulsorily segregated. In Bengal The Mission to Lepers was able, through the generosity of a European business man in Calcutta, to provide the Bengal Government with Rs. 50,000 for the purchase of a site for the Settlement which it had decided it would build. A fine site of over 700 acres was chosen near Midnapore and purchased, and it is hoped that the plans now being made for the erection of the needed buildings will soon be carried out, and that the many beggar

lepers in Calcutta and elsewhere in Bengal, will be persuaded to go and live at the Settlement. There they will be provided with suitable houses, and given gardens. There will be plantations where they will be able to grow a good deal of their food, and it is hoped that the Settlement will become a place where the lepers will really settle down happily in small communities. The single men, the single women, and the married lepers, will all have their own parts of the Settlement, games will be provided in common rooms, recreation will be arranged for, and everything will be done to make the people as happy as possible.

The Madras Government has recently purchased some 240 acres of land at Chingleput and has commenced to erect buildings for pauper and beggar lepers. The scheme is an ambitious one and will, it is hoped, be completed in two years. This definite action is almost entirely the result of the keen interest shown in the proposals by Their Excellencies the Governor, Lord Willingdon, and his enthusiastic wife Lady Willingdon. The Settlement has been called "The Lady Willingdon Leper Settlement," and was officially opened by The Governor and Lady Willingdon just before they left India.

In the Bombay Presidency there is a scheme under discussion for the removal of the Municipal and Government "Ackworth Asylum," now situated at Matunga, to the mainland. If the site of the present institution were sold and the money thus obtained used for the purchase of a new large site, some thirty miles away from Bombay City, there would also be enough money available for the erection of a

really up-to-date Leper Settlement for two or three thousand pauper and beggar lepers.

In the Central Provinces a scheme for the establishment of a central Leper Settlement near Raipur is under consideration, while money has also been provided in the current year for helping rebuild The Mission to Lepers' asylum at Dhamtari, and also enlarge two other of the Mission's asylums, those at Champa and Chandkuri.

The United Provinces Government in 1921 appointed a strong committee to consider what action ought to be taken with regard to dealing with the pauper and beggar lepers in its area. The whole position was reviewed and it was suggested that several new asylums for voluntary inmates should be erected, and, in addition, at least three large Leper Settlements for compulsorily segregated lepers. Financial stringency, however, has so far prevented any action being taken. There is the intention to take up the matter thoroughly as soon as money is available.

In the Bihar and Orissa Provincial Government considerable attention has been paid to the problem of the lepers, and the existing asylums are to be enlarged where necessary. A new leper colony has been started for voluntary lepers among the Santals. A large piece of land was set aside for the project, and this new type of work is being very ably undertaken by Scandinavian Missionaries. The local Government has so far given good help and has promised to give maintenance grants. The latest information is that there are already 140 inmates and there are numbers seeking admission.

A most promising start has been made and those in charge are certainly working on right lines.

There are, comparatively speaking, not very many lepers in the Punjab, but the Government there is alive to the need of something being done, and steps are sure to be taken, when there is more money available than at present, for taking up new schemes.

Assam comes second in the list of Provinces when the number of lepers in proportion to the population is considered, but, on the other hand, this Province comes eighth in the list of nine Provinces in the number of actual lepers to be considered, having only 4,464 enumerated in the last Census. There is, however, great need for the whole matter to be carefully looked into, as the incidence of the disease could be greatly reduced if adequate measures for dealing with the lepers were introduced.

Burma stands first in the list of Provinces in the number of lepers in proportion to the population, and it has a total of 8,765 lepers in the Province. This shows an increase of 2,727 lepers over the figures of the Census of ten years ago. Whether it is a case of more careful enumeration, or whether there is an actual increase in the number of lepers, is a difficult matter to determine, but one ventures to suggest that the matter ought to receive very careful attention from the Government.

The figures for the Provinces tell us that there is a total number of 73 asylums in the nine Provinces, with 7,311 leper inmates. This gives one leper asylum for every 1,250 lepers enumerated in the Census, and an average number of 100 lepers in

each asylum. This includes, of course, asylums of all kinds, and the majority of them belong to The Mission to Lepers.

On the whole it may be said that the Provincial Governments are alive to the need of something more being done for the lepers, and everywhere most sympathetic support is given to those who are prepared to undertake leper work. So far as I am aware every Provincial Government gives financial help to all doing leper work, as long as their work receives the approval of the Government medical authorities.

Native State Action.

According to the statistics which were collected by me some six years ago there are a number of leper asylums in the various Native States in India. Recent figures for some of these are available and show that good work is, on the whole, being done. The asylums, however, are on an average smaller than those in the Provinces. The average number of inmates per asylum in the Native States is 72, and altogether I think that there are about 16 asylums belonging to the Native States. As far as I can find out there is an asylum, at least it is so in the chief of the States, for 864 lepers enumerated in the Census, and a total number of 793 leper inmates in the asylums in the largest States.

Other Helpers.

Besides the leper asylums belonging to The Mission to Lepers, the Provincial Governments and

Municipalities and the Native States, there are a few other leper institutions belonging to Missionary Societies, such as the one at Dichpalli which is the property of the Wesleyan Missionary Society, although this is helped financially to a considerable extent by The Mission to Lepers. There is also the small asylum at Bapatla connected with the Welsh Baptist Mission, and a few belonging to the Roman Catholic Missions. A few small institutions are kept going by local Committees but it must be admitted that some of these are not very successful.

The lepers therefore have many friends who are doing as much as they can to help them. But when we think of the probable total number of lepers it seems that very little is being done. There are, according to the 1921 Census, 102,513 lepers in the Indian Empire. Altogether there are only 94 leper asylums in existence to meet the needs of this large number. This means that only 89 lepers in every 1,000 are cared for in any sort of an institution. Conditions are just about the same whether we take British India (in its nine Provinces) which has 88 per thousand in asylums, or whether we deal with the principal Native States, where there are 84 per thousand in Homes.

The following is a summary of the number of asylums, and their inmates, in the Provinces and chief Native States. Full details for the Provinces will be found in Appendix B, and I regret that I cannot give full up-to-date details for the whole of India.

NUMBER OF LEPERS IN LEPER ASYLUMS IN INDIA.

INDIA.	No. of Lepers 1921 Census	Total No. of Asylums.	Total No. of Inmates in Leper Asylums.	Percentage of Lepers in Leper Asylums.
India as a whole	102,513	94	9,226	8.90
<i>Provinces :</i>				
Punjab ..	2,727	6	470	17.2
Central Provs.	8,025	9	1,373	17.1
Bombay ..	9,709	14	1,091	11.2
Bihar & Orissa	12,269	9	1,322	10.7
United Provs.	12,647	14	802	6.3
Madras ..	15,753	11	979	6.2
Burma ..	9,765	4	556	5.8
Bengal ..	15,897	3	649	4.0
Assam ..	4,464	3	69	1.5
Totals	91,256	73	7,311	8.8
<i>Native States :</i>				
Travancore	2,058	3	245	11.9
Cochin ..	466	1	50	10.7
Kashmir ..	1,485	3	157	10.5
Baroda ..	552	1	51	9.2
Mysore ..	314	1	27	8.5
Hyderabad ..	4,214	1	253	6.0
Gwalior ..	418	1	10	2.3
Totals	9,507	11	793	8.4

Some workers among lepers.

Magnificent work has been done for lepers by many Christian Missionaries during the last fifty years in India. The Lutheran Missionaries, Hahn and Wagner, were pioneers at Purulia. Canon Guilford was the leading spirit in the Punjab. Professor Higginbottom at Naini has built up a large work,

while the Rev. P. A. Penner has built a model leper asylum at Champa in the Central Provinces. The men missionaries have done valiant work for the lepers, and still are doing so all over India, carrying out their Lord's command.

When our Lord was upon the earth there was, in addition to the chosen men followers, a band of godly women who ministered to Him, and we may be sure that they also helped minister to the crowds of sick people who thronged around our Master as He travelled through the land. For women have ever been ready to tend the sick and relieve the distressed, and it is little wonder, therefore, that there are in India to-day several women who have charge of Leper Asylums. At Chandag there is Miss Mary Reed, at Nasik Miss Harvey, at Mourbhanj Miss Kate Allenby, at Ramachandrapuram Miss Hatch, and at Viziana-gram Miss Flora Clarke, while at other Asylums the wives spend much time in looking after the child lepers, the Homes for the untainted children of the lepers, and, in other cases, notably that of Dr. Mrs. Kerr, they look after the medical side of the work.

Surely if ever sick people needed the tender ministry of gracious womanhood, our poor sick lepers do. They suffer greatly in body, they suffer much in mind, and need a consolation that a man, however attentive and unselfish he be, can hardly give. So our splendid women give their time and help to these outcasts, and no one can chronicle how wonderfully they succeed in binding up the broken-hearted, and healing the sick of body and mind.

It is difficult to leave out any when writing on such a subject, but there are three women who are, in my judgment, outstanding to-day in leper work.

Many years ago the name of Miss Mary Reed was almost a household name in Christian circles, and it is well that she should stand first. For one reason, she has laboured so long for lepers, though there are other reasons why she naturally comes first to the mind. She was herself a missionary of the Methodist Episcopal Mission of America and laboured in the United Provinces in India for some years after she went to India in 1884. She suffered greatly in health, however, and in 1890 she returned to America in search of renewed health for further service. While ill in America the doctors discovered that she had contracted leprosy. How it had come to her none know, so she herself told me, but the diagnosis was confirmed by several doctors. The great soul, for she is a wonderfully brave woman, returned to India without acquainting any of her friends or relatives, with the single exception of one sister, with the nature of the awful disease from which she was suffering. On arrival in India her Mission approached The Mission to Lepers with a view to finding Miss Reed a sphere of work among her fellow-sufferers. Soon it was arranged that Miss Reed should have charge of the Leper Asylum at Chandag Heights, and she has lived there almost the whole time since then. Twice she has been able to leave India for a very short time, once going to the Holy Land, and a few times she has been to visit other Mission Stations, but for nearly thirty-three years now she has laboured among her loved

people. I was privileged to stay at Chandag some two years ago. Never will my wife or I forget the five days we enjoyed as her guests. Before we went she wrote and told us that her average number of outside visitors, during some thirty years, had been one in three years ! Yet all the time she had kept on bravely, doing a magnificent work, not only among the lepers, but among the villagers in the one hundred odd villages around her. She lives among the mountains, over 6,000 feet above sea, right away five days beyond Almora along a mountain path. When we were there she had 48 women lepers living quite near her and all were Christians. I wish readers could have heard those Indian women praying for her, as they did when I was there, as their "dear Mother." Verily she is that, and more, to them all. She also has an asylum for leper men, with some 25 inmates, and quite a number of these are also Christians. For many years the progress of the disease was stayed in answer to prayer, and when we were at Chandag Miss Reed was fairly well, as can be seen from the photograph opposite page 2, and which I was privileged to take, and we trust that she may long be spared, though she is nearly 70 now, to work among the people to whom she has devoted her life. Surely here is life's devotion sweetly outpoured at the Master's feet ! What an example !

For three or four years I had hoped to be able to meet Miss R. Harvey, but I had been hindered for one reason and another, till November 1922, when I was enabled to visit Nasik. We had often corresponded, but it is so very different to meet

face to face. I confess that I was thrilled when I met Miss Harvey, and I wish others to know why. Miss Harvey has been in India for 40 years. I believe I am right in saying that she has never been back to England since she went to India. She had one furlough which she took in New Zealand. England's loss is very great ! She has been engaged in women's work, being a missionary of the Zenana Bible and Medical Mission, and she has also had charge of a Leper Asylum belonging to The Mission to Lepers. I believe she has had to do with leper work for some 30 years at least. I visited the asylum and it is well built, splendidly managed, and in good order in every way.

Miss Harvey is now 70 years of age, and she has obtained permission from her Mission, so she told me, to leave her ordinary work, for she has decided, as she so beautifully told me when I was there, to give up the rest of her life to working among the lepers. She said, " I want to make my leper asylum what I have for many years wanted it to be, but have never had time to make it." Mind you, that is what she is going to do now that she is 70 years of age. Do you wonder that I was thrilled ? Instead of coming home and settling down to a time of quiet, instead of retiring to be waited on by others, instead of giving up work, she is eager to do more than she has ever done. I think that John Oxenham's lines apply to her :—

" Where are you going, Great-Heart ?
 ' To cleanse the earth of noisome things,
 To draw from earth its poison-stings.'
Then God go with you, Great-Heart ! "

Miss Rosalie Harvey is certainly one of the great women in India to-day, and when I ventured to say a little of what I thought, she gently said to me, "Oh, do not say that; I think it is a very simple thing to do." I am certain that many will agree with me when I say that I do not think that it is at all a simple thing to do, and I am sure that our Lord will smile upon such devotion to the needy ones for whom He cares so much.

Dr. Isabel Kerr is the wife of the Rev. George M. Kerr of the Wesleyan Missionary Society. He is the superintendent of the Leper Asylum at Dichpalli in the Nizam's Dominions, and Dr. Mrs. Kerr has charge of the medical side of the work. Twice it has been my privilege to stay with Mr. and Dr. Kerr and see at close quarters their splendid work. They have some 350 lepers in their care and an up-to-date institution which they have built up during the last few years. Here I saw Dr. Kerr at work in her dispensary, giving injections to the lepers. Opposite page 48 Dr. Kerr is seen giving an intravenous injection to a leper girl. She is now helped by Dr. Lowe and Nurse Mead, and the finest work being done in any part of India by a medical missionary in the treatment of the disease itself is being done by Dr. Kerr at this station. She works in her dispensary for hours every morning, examining, diagnosing, injecting, tabulating, and her work is wonderfully successful. Of course, it is not easy work, nor is it always pleasant, to say the least of it, but it is resulting in our seeing what leper workers have never seen before, the lepers getting better.

Here is a very clever Doctor spending her time and strength in bringing back the smile to the face, the spring to the step, and the hope to the heart. It is work in which she joys, and we honour her for it.

These are but three of the Christ-like women who nowadays are cleansing the lepers.

Nor are these alone in their service for the lepers, because Christian Indians have, wherever opportunity has come to them, done noble service for the lepers. To tell the truth, one does not at all wonder that Indians who have become followers of Jesus Christ, and have learned a new sympathy with those who are in trouble, should be willing to give their time and strength in looking after lepers.

Dr. Babu J. Sisingi holds a place of special honour among Indian workers for lepers, as he has rendered devoted service among the lepers at the Purulia Leper Asylum for a period of 30 years. Year after year he has gone on with his trying work, and I think that he is certainly the veteran Indian medical man working amongst lepers in the whole of India. One is glad to note that the Government of India has recently conferred upon him the Kaiser-i-Hind Silver Medal (which is given for public service) as a mark of appreciation of his long service.

Dr. Das has for many years done splendid work as colleague to Canon Guilford at the Tarn Taran Leper Asylum in the Punjab. At Ramachandrapuram in the Madras Presidency, Dr. J. L. Joshee has for many years been in charge of the medical work at the leper asylum in that place, and on more than one occasion has acted as Honorary

Superintendent in the absence of Miss I. Hatch. Mr. Chas. Peacock has, during the last few years, rendered excellent service in taking charge of the leper asylum at Salur, while Mr. P. A. N. Sen has laboured unceasingly in Calcutta for the destitute lepers in that City, as well as visiting the leper asylum at Gobra.

Nor must I omit to mention how splendidly Mrs. Das, Mrs. Joshee and Mrs. Sen have seconded their husband's efforts. Mrs. Das and Mrs. Joshee have been largely responsible for the care of the untainted children in the special homes for these children where they live. Many others of those who regularly work among lepers might be named but space will not permit.

One other only will I mention and he is Sadhu Sundar Singh. This great Indian Christian mystic and ascetic, from the earliest days of his connection with Sabathu, where it will be remembered he received his definite calling to the Sadhu life, has always taken a great interest in the lepers at the Sabathu Asylum. A photograph of this asylum is shown opposite page 2. Mrs. Parker, in her life of the Sadhu, tells us how he went and worked at this leper asylum in company with Mr. Stokes in the year 1907. Not much longer than a year ago I had the privilege of spending a couple of days in the same house with the Sadhu at Sabathu, and he then told me that he had recently been preaching to the lepers at Naini (Allahabad), and had been invited to go back and hold a Mission among them, but I fear he was not able to do this. At that time the Sadhu said how he loved going down the

hill and preaching to the lepers, and wherever he has a chance of doing this he is sure to be found ministering to those lonely people, who so greatly appreciate a visit from this wonderful teacher.

While it is certainly true that Christian women and men, Indian, British, American and from other countries, have done most for the lepers in India, yet it is not to be overlooked that good work has also been done by some others, Indians especially. Some have actually worked among the lepers, while others have given of their wealth. Rai Debendro Nath Mullick Bahadur, of Calcutta, gave a substantial sum for the building of a new leper asylum near Madras, as well as setting apart a sum which provides for the maintenance of a considerable number of lepers at two leper asylums in Bengal. Sir Onkar Mull Jatia, of Calcutta, and others, have also liberally contributed for leper work. British firms working in India have not been behindhand in their gifts.

Now that constructive work can be planned it is greatly to be hoped that many others will follow their splendid example.

CHAPTER IV

THE LEPERS' RESPONSE

ALL who have had much to do with work among lepers are enthusiastic about it. The wonder of being able to bring back hope to the absolutely hopeless people who come into the homes for lepers is something that is very stirring. One doubts if there are any people anywhere quite so deep in despair and so without any pleasure or hope as are the lepers. When, therefore, they are persuaded to enter an institution where they receive kindly attention, and their simple wants are supplied, it is remarkable how responsive they are. Some of the poor people have been wanderers in the land for many years, travelling long distances between melas and places of pilgrimage. They have been sometimes ill used, often cursed, generally despised, always in great need. When one sees them in their filthy rags, hobbling and crawling about, pinched in face and weak in body, emaciated to the last degree, one realises a little of what it must mean of relief when a leper enters a refuge and receives Christian sympathy and treatment. To be welcomed, instead of being told to "clear out"; to be fed, instead of being semi-starved most of the time; to be clothed, instead of being in rags and tatters; to be told that there is hope of salvation through a Saviour, instead of having it dinned

into them that the gods have cursed them ; what a heaven it is to the leper !

It must be remembered that of the more than 9,000 leper inmates in the various leper asylums in India, there are comparatively few who are there by compulsion. I doubt if it would be more than 500 at the very outside. The majority are voluntary inmates, about 98 per cent. in the case of those who are in the asylums connected with The Mission to Lepers. They come in because they are in need, and here is shelter, food and clothing. The majority of them come to stay, remaining of their own free-will for years together. The Mission to Lepers does not in any way encourage the travelling of lepers up and down the country, and in some extreme cases lepers have, after warning, been refused re-admission, if they have left the asylum without permission. But comparatively few are not really contented with the conditions in the homes to which they go.

Lepers in Homes are very happy.

The lepers respond in a wonderful way to the attention they receive, and it is most evident to all who visit the institutions that the lepers are very happy indeed.

An Inspector-General of Civil Hospitals for the Central Provinces wrote :—

“The inmates of the Champa Asylum were bright and cheery.”

Another Inspector-General of Civil Hospitals wrote about the Chandkuri Asylum :—

“The benefit to the lepers is immense. The inmates here

are well-fed and happy. Indeed it has struck me that both here and at Champa I have seen more cheerful and smiling faces than in any village in the Central Provinces, in spite of the inmates being mostly in advanced stages of their diseases."

A Lieut.-Colonel of the Indian Medical Service wrote of "The sense of well-being and happiness among the lepers living under conditions that resemble life in an Indian village, but with improved habitations and better water supply," referring to "A successful leper asylum" which he had visited.

Sir Edward A. Gait, when Governor of the Province of Bihar and Orissa, wrote :—

"The lepers in asylums maintained by The Mission to Lepers are as happy and contented as it is possible for persons to be when suffering from such a terrible disease."

The lepers at Purulia sent the following letter some time ago :—

"We, the men and women in the Leper Asylum at Purulia, send you a thousand thanks. We have now good houses to dwell in, and a doctor and medicine to heal our ulcers. We have teachers and pastors to instruct, guide, and comfort us. All these advantages we owe, next to God, to you, our benefactors and friends.

"Our nearest relatives have abandoned and forsaken us, and there was no place left on earth where we could rest and stay without molestation. People seeing us from a distance shouted, 'Begone! Begone!'"

The lepers in a certain asylum said :—

"What can we say but that we are utterly grateful. We are well fed, well clothed, well housed. What more can be done for us?"

The following is an extract from an address which was presented to the writer when he was visiting a leper asylum in South India :—

"We, the inmates of the Mission Leper Asylum at Chevayur, Calicut, beg respectfully to approach you with this our humble, but sincere, token of our love and regard for you and for the organization you represent.

"Veritable outcastes of society, forsaken by those dear, and near to us, carrying the impress of God's wrath for our sins on our physical body, you have given us asylum, comfort and solace, freedom from the cares of this world, so that we might pass the twilight of our life in repentance, and meditation of God, and pass on to the world beyond in peace.

"Yours is a labour of love, a life dedicated to the service of God and of man, and it is only in the fitness of things that we, for whom you have done so much, should avail ourselves of this opportunity to tender you our deep and heartfelt thanks."

Discipline in Asylums.

When large numbers of sick people have to be dealt with it must be expected that at times some of them will show a tendency to give trouble and break the simple rules which there must be in any institution. On the whole there is no trouble at all in keeping order. This is certainly so in a Mission asylum, and in the larger institutions, as at Purulia, there is a council of men and women lepers which meets each week to deal with the distribution of food, etc. This council, or "panchayat," as it is called, considers all minor matters requiring discipline, and the council decides what the punishment shall be. Perhaps it will be a small fine, or the forfeit of some additional gift that is expected, or there will be some other way of showing that the guilty person is under the displeasure of the others. Serious matters, of course, are dealt with by the Superintendent, but wherever possible the lepers

are allowed to decide what shall be done. This encourages the community life in the asylum, and tends to give the lepers a feeling that the institution is really their home.

Lepers prove their gratitude.

The response that the lepers give is not that of the lip only, saying that they are thankful, but they show by their unselfishness that they have been deeply moved. I was greatly touched not long ago on hearing, from a Superintendent at one of The Mission to Lepers' large institutions, that one day a number of new lepers came to beg for admission. The asylum was already full to overcrowding, and the Superintendent felt that he could not take in any more till there was more accommodation. Where sick people are concerned they cannot be crowded together too much. All but one went sadly away. He was an old man who was in an advanced stage of the disease and the Superintendent's heart had ached as he had had to refuse to admit him. Towards the evening a number of the lepers went to the Superintendent and said that they had been talking it over and some of them had come to say that if only the Superintendent would admit the old man they would make room for him in their quarters, and quite a number had said that they would give a little of their food every day so that the old man might be fed. When it is remembered that they were then sleeping five in a room about twelve or thirteen feet square, and their rations were none too liberal as it was, it will be seen that it meant a good deal for the lepers to offer to do this.

They pleaded that the old man might have a chance of enjoying some of what meant so much to themselves, and, needless to say, the poor sick man was admitted.

This is from the Report of another Asylum :—

“ We are sorry indeed to have lost our leper Mada, whom our lepers have been supporting for the last 15 years or more, from handfuls of rice taken out of their weekly food allowance, because, at the time he came, the funds were so low that there was no possibility of admission.”

Verily these people must greatly appreciate what they receive when they are willing to deny themselves some of their food allowance in order that another sufferer may share the benefits received in the asylum.

A touching story is told of the lepers in the asylum at Almora.

When famine was devastating many parts of India, the Almora lepers thought that, although there was no scarcity in their own district, they would do something for those in need.

Moved by sympathy for the starving, the leper congregation, at the close of the service one Sunday, informed the Superintendent that they wished to observe the following Tuesday as a day of fasting—on behalf of the famine-stricken people far away. Accordingly on the morning appointed, instead of gathering at the food store for their daily supply, they assembled in the Chapel of the Asylum. Fervent thanksgivings were given for their own blessings, accompanied by earnest prayers that their act of self-denial might be accepted, and their gifts used to relieve a few of those perishing with hunger.

Lepers serve one another.

In most asylums some of the humbler offices are filled by lepers. Some are trained by the doctor, and many have become quite good dressers. Others do the teaching, having become qualified before they became lepers. I remember that in an asylum in the Central Provinces I saw a young woman who was splendidly educated, having been trained as a teacher, teaching the other leper women who had not received the same advantages as herself. To-day educational work of a simple kind is being carried on by lepers for lepers in various parts of India.

In another asylum the doctor's laboratory assistant is a young Indian leper, who was an assistant in teaching science in a College, and therefore well qualified to do careful work. In another institution the Assistant Superintendent is a young Anglo-Indian leper, and he has done excellent work in managing the small institution where he lives. He made a special study of gardening, and some of the best crops I have seen in small gardens were obtained by lepers under his supervision.

Others who are not qualified to do work which requires much training are nevertheless eager to do what they can for those around them who are not able to do as much as they can. In several asylums there are those who are ready to wheel about, in simple carts which the lepers themselves often make, those who are crippled and unable to walk. In one case a leper who had no hands used to carry about on his back a leper who had no feet, but who had hands—the one doing for his friend what the other could not do.

In some asylums there are bands which play simple music and thus provide amusement for the others. When I visited the asylum at Meerut recently we were met some little distance away by the leper band which led us in procession to the place of meeting. At Parulia I was present at an entertainment given one evening by the leper boys in the asylum. They had thoroughly learned an Indian version of "The Prodigal Son," and wonderful was the enjoyment and good the instruction given.

Lepers give liberally.

Lepers respond splendidly when there is any call for giving. Indeed, they often seem to give more than one feels they ought, so keen are they to show how grateful they are for all they receive.

At one asylum I was told that in one year the lepers had given the following :—

Rs. 70 (nearly £5) to the St. John Ambulance Association. (This was during the late war).
Rs. 80 to The British and Foreign Bible Society, and
Rs. 20 to The India Sunday School Union.

A few months ago I visited an asylum in the Central Provinces where the lepers had not long before given :—

Rs. 100 for Russian Famine sufferers.
Rs. 85 towards the erection of a Church for American Protestant lepers in the American National Home for Lepers.

Not far away I went to another asylum where the lepers had given :—

Rs. 25 to the Indian Book and Tract Fund.
Rs. 40 to the British and Foreign Bible Society.

Rs. 75 towards the cost of a new Church which they needed in the asylum, as well as,

Rs. 100 to the local Indian Church Mission Fund, for sending out evangelists to the people around the asylum, not lepers of course.

When it is remembered that the majority of these lepers are practically paupers, having no money of their own, and that they have to save up the money they give in these ways, saving it from the small amount they receive, perhaps about one shilling a month, from which they buy the little etceteras which they have really as part of their rations, it is really wonderful that they are able to give at all. It means that there is extraordinary self-denial on their part, and some of them even deny themselves some of the things that perhaps they ought to have, for the sake of others.

In addition to these special gifts they regularly give to the Church collections. Here they give not money only, but in some lepers' Churches there are two big baskets placed in front of the congregation in which they place small gifts of rice, or grain as the case may be, as their weekly offering. This is afterwards taken to the asylum store and the value of it is credited to the fund for which the offering has been taken. There are many stories that might be told, by those who care for lepers, of those who give "the widow's mite," and that not once only, but time after time it is done.

Splendid Christian lives.

To see the leper inmates of a large asylum gathered together in their Church, or it may be in the open

air if it is the cold weather, is a picture that will not soon be forgotten. The men sit on one side of the central aisle in the Church, the women on the other side and the children sit in the front. If there is a band, that will be somewhere near the front, and around the players are seated the best singers, and those who can read from the hymn books provided. To hear them sing is a never-to-be-forgotten experience, though one grants that some of the voices are harsh and cracked, but the people sing from full hearts, and some of the younger people have quite good voices, and they love to sing.

To hear them pray is to hear the outpouring of hearts that are full of praise and a deep joy and peace. Never shall I forget hearing some of the leper women at Chandag, Miss Mary Reed's asylum, pray for their dear superintendent, blessing God that she had been sent to them, and praying that she might be spared long to minister to them.

At Chandag the leper women have a Prayer Room where every day at noon a Praying Band meets together for a season of praise and prayer.

At Purulia there is a Prayer Room in the centre of the asylum and it is always open ; many a leper retires there for quiet meditation and prayer, or a number will join together and have a Prayer Meeting. The Christian lepers know from experience that prayer is answered.

To watch them as they listen to the speaker is a wonderful sight. It has often been my privilege to preach to leper congregations, and I never wish for more attentive listeners. They respond so quickly to the message, and their faces, marred

though so many of them are, light up with a holy joy as they enter into the spirit of what is being set before them.

To witness a baptismal service is to have an experience that will remain in the memory for all time. Would that all readers could have been present at a memorable service held at the Purulia asylum when, one Sunday morning, in a service that lasted over three hours, one hundred and five lepers were baptized. As each came up to be baptized he placed in a special collection plate an offering to express his gratitude. Every man and woman took a new, a Christian, name, one from the Bible, and the old heathen name was not used again.

One Sunday afternoon in the cold weather I was present at a very memorable service at the Champa Leper Asylum. The lepers felt that it was chilly in their big church and so we gathered in the open air. The visitor and the missionaries sat under the trees, glad of the welcome shade, but the lepers seated themselves in front, in a large semicircle, glad of the warmth of the bright sunshine. After the preliminary service and a sermon each leper candidate for baptism arose when his name was called and repeated a short creed, thus publicly testifying to his faith. Fifty-four men and women publicly gave their testimony and were then baptized. Such scenes are not at all uncommon in the leper asylums which belong to The Mission to Lepers.

The most moving services I have ever attended have been those when I gathered with lepers for Communion. There is always something very wonderful in such a solemn service, but one is moved

to the very depths of one's being as one notices that many of the lepers, although their faces show the joy they are experiencing, are so deformed and helpless that the bread has to be put into the mouth and the cup must be held, by the one who ministers, to the lips of the leper receiving the wine.

The Rev. Arthur Parker at Trivandrum writes :—

“ There are no seasons of deeper joy to the missionary than when he goes down for the Communion Service with this little church. There is nothing but joy in that service. No repining, no despair, but only a gracious hope and signs of present happiness and peace. We cannot pass the cup from hand to hand, but each has a cunningly devised cup made from a twisted leaf secured by thorn, into which the wine is poured, and the bread is dropped into the outspread and often fingerless palm.”

The daily lives of the Christian lepers show that they are really followers of our Lord. It is a marvellous thing to see the transformations that take place in the lives of some of the lepers. Many of them come in as sinful men and women. What wonder, seeing how and where they have lived ! But the foul-mouthed come, after a time, to sing the praises of God ; the impure become pure, there is a real change that takes place, and it is inspiring to see it.

The response from the leper, whether he be a Christian or not, is simply splendid, and I have never seen greater gratitude than that shown by some of these poor outcast people who are loathed by many, and neglected by the majority, of their fellow countrymen.

CHAPTER V

THE LEPERS' HOPE

The Treatment for Leprosy.

FROM the earliest times leprosy has been considered to be incurable, and until quite recently all workers amongst lepers have felt that there was no definite hope of recovery that could be held out to the leper. Ever since modern medical men have been doing research work in tropical diseases, however, attention has been given to leprosy. It was in 1874 that Armauer Hansen discovered the bacillus of leprosy, the bacillus lepra as it is called. From that time onward eminent doctors have studied the disease itself and have tried to find something which would stay its ravages, if not entirely eradicate the disease from the system.

Nastin, Leprolin, Anti-leprol, Gurjun Oil, Ichthyol, Salvarsan, Tuberculin, Perchloride of Mercury, Salicylate of Soda, Thyroidin, Hydroxylamin, Europhen, Naphthol, Salol, Methylene Blue and Aristol are among the many remedies that have been suggested from time to time and tried. Some have given apparently good results in a few cases, but none have stood any prolonged or thorough test.

In summarising what has been done recently with regard to the treatment of leprosy, I cannot do

better than quote what Sir Leonard Rogers recently said, in a lecture that he delivered before the Royal Society of Arts :—

" I now come to the work of the last few years in improving the treatment of leprosy. This advance has been attained through the labours of several research workers, among whom I am fortunate enough to have a place, and its history is briefly as follows. As early as 1854 the attention of English physicians was drawn to an old Indian remedy for leprosy, chaulmoogra oil, at first erroneously thought to be derived from the seeds of the tree *Gynocardia odorata*, but later shown by Sir David Prain to be from those of the Assam and Burma tree, *Taraktogenos kurzii*, while Philippine observers still later showed that the seeds of various species of *Hydnocarpus* contained the same active principles, chaulmoogric and hydnocarpic acids, first isolated together with gynocardic acid by Power. The crude oil given by the mouth undoubtedly has a good effect in leprosy, but owing to the difficulty most patients have in taking effective doses for long on account of its nauseating properties, it failed to do more than temporarily retard the progress of typical advanced cases, although Hopkins in Louisiana showed that a certain number of incipient cases might become free from outward signs of the disease. The drug thus failed to be of more than palliative value. Attention was next directed to bacterial injections as the result of the establishment of vaccine immunology by Sir Almroth Wright, and some striking improvements were obtained, which, unfortunately, did not prove to be very lasting in nature. Research once more became directed to the old Indian remedy and efforts were made to find a suitable method of administering it by injection to overcome the limitations of the oral method, a case having been reported from Egypt as early as 1899 of apparent recovery after a five years' course of such injections, of a painful nature, which few patients are willing to submit to, and in 1914 Dr. Heiser in the Philippines recorded apparent cures of 11 per cent. of a small series of cases treated by this method. In 1915 Dr. Heiser visited

me in Calcutta and asked me to take up work at the subject, when I showed him a medical man who had nearly recovered under large doses of gynocardic acid, being the lower melting point fatty acids of chaulmoogra oil, which I had found to be better borne orally and more effective than the whole oil. With the help of Dr. Chuni Lal Bose, of the Calcutta Medical College chemical laboratory, Sodium gynocardate was made, and I found it to be of value in leprosy subcutaneously, although painful, which limited its practical value. I next ascertained its suitability for intravenous injection and found this method of administration to be almost painless and much more efficient, and I very soon obtained local inflammatory reactions in the leprosy tissues, with rapid destruction of the causative organism, such as I had not seen previously, and at once realised that an important advance had been made, which I followed up during my last four years in India, and arranged before I left for this research to be continued by Dr. E. Muir. During the next three years, I made a further advance by showing that soluble preparations from other oils, including those of cod-liver oil and soya bean, were also effective in leprosy, to which two others have recently been added by Dr. Muir, and thus I established the important principle that the beneficial effects are not limited to chaulmoogra and hydnocarpus oils with their peculiar types of unsaturated fatty acids, as had previously been thought to be the case, and thus opened out a wide field of research. Professor Dean and his colleagues in Honolulu soon confirmed my work and introduced the useful modification of injecting intramuscularly another soluble product he made, ethyl ester chaulmoograte, which can more simply and rapidly be administered intramuscularly than the sodium salts intravenously, although the latter also sometimes are required in resisting cases. By these methods the leprosy bacilli are gradually destroyed within the tissues and may in time completely disappear, as far as microscopical examinations show, together with all outward signs of the disease."

The Ethyl Ester preparations of Chaulmoogra and

Hydnocarpus oils may be used both intramuscularly and intravenously, and Dr. Muir's usual practice is to give one intravenous injection and one intramuscular injection in the week. The ethyl esters of other oils, as has been pointed out by Sir Leonard Rogers, such as cod liver oil, neem oil, olive and linseed oils, and the oil of the soya bean, are also beneficial in some cases of leprosy, but general experience seems to point to the fact that the ethyl ester hydnocarpatus gives the best results in the majority of cases. Until quite recently it has been found very difficult to persuade lepers to take these new treatments, as they were firmly convinced that there was absolutely no hope of recovery. Moreover, when these later treatments were first used, and when they were not so beneficial in results as they are now, the lepers suffered in many cases severe reactions, and that frightened others, who were watching the results in those who were brave enough to take the treatment. Now, however, the treatments have been so far improved, that the lepers are willing to take treatment.

Dr. Muir pointed out that patients under treatment for leprosy should always be warned that the first change that they may notice in their condition may apparently be a change for the worse. In nodular cases the reaction may be accompanied by the swelling up of old nodular tissues or the appearance of fresh nodules ; but these soon subside and leave the condition considerably better than before. In nerve leprosy the anaesthesia may at first become more marked and the area affected may become larger ; but this again is soon followed by improve-

ment. It will be seen from the above that to obtain the best results from treatment individual attention to each case is absolutely essential. These drugs act by destroying the causal organism of the disease ; they will not restore deformities. It is therefore important in selecting cases to be treated to choose those who have active disease in the body. Little benefit can be expected by treating those in whom the active disease has practically disappeared, and whose deformed bodies alone remain to testify to its former ravages.

Dr. Muir says :—

" In cases which do not yield to any single form of treatment we recommend a triple combination, viz., injections of 50 per cent. hydnicarpus esters in pure olive oil, the solution containing also 10 per cent. thymol ; potassium iodide orally in small doses rising to large doses as long as there is no reaction ; the local application of a 20 to 30 per cent. solution of trichloro-acetic acid in distilled water with a glass rod covered with cotton wool, applications being made at intervals of from 7 to 14 days to all skin lesions.

" Of equal or even greater importance in the treatment of leprosy is attention to concurrent and predisposing disease which are found in most cases, and without attention to which the best special treatment is often found to be useless. Diet, hygienic surroundings, cleanliness, cheerfulness and abundant exercise are also important points, which when neglected lead to negative results."

Sir Leonard Rogers, reviewing a recent article by Dr. Muir, says :—

" The principles underlying the treatment are the necessity of strengthening the body resistance and inducing repeated small reactions due to breaking up and setting free the bacilli in the tissues, which must be carefully controlled to prevent their being excessive, and of avoiding passive congestion

in the lesions. A rise of temperature may be beneficial ; a case in which the onset of kala-azar cleared up the leprotic lesions is mentioned. Exercise strengthens the body, enabling it to destroy the bacilli and assist the cure, and also prevents capillary congestion. Cases complicated with syphilis or with a strong Wassermann reaction should be also treated for this disease, hookworms should be expelled and the general health maintained. Without attention to these points the specific treatment is not nearly so effective."

Chaulmoogra oil is obtained from the ripe fruit of the tree called *Taroktogenos Kurzii*, which is found in the Assam Valley and the Chittagong Hill Tracts. The fruit contains a large number of small seeds from which oil is expressed. *Hydnocarpus* oil is obtained from the *Hydnocarpus Wightiana*, and various species of this tree are found in Southern India, Ceylon, Burma and Assam. It is important to collect the fresh seeds of the various trees, and it is anticipated that in a short time these trees will be grown in a number of fresh centres in India, and that a large supply of the oil at a much cheaper rate will be obtainable, although the latest information available is that *Hydnocarpus* oil may be obtained in quite large quantities in the Cochin State.

This is not the place in which to enter in detail into the question of the treatment of leprosy, nor am I competent to deal with that side of the subject, but it may be noted that Sir Leonard Rogers and Dr. Muir are collaborating in writing what will be the most important book that has ever been written on the subject of leprosy and its treatment.

Several other important matters must be considered when the treatment of leprosy is undertaken.

Considerable attention must be given to the question of diet, as certain foods are very helpful, while others are harmful while the treatment is being taken. Exercise is also of great importance, and where the lepers receiving the treatment are able to take regular exercise, the improvement is much more marked than in those cases where this is not possible. This is an added reason why gardens should be provided in leper asylums and settlements.

All workers amongst lepers are, perhaps more than they realise, indebted to Sir Leonard Rogers for the wonderful work that he has done in the last few years in improving the treatment of leprosy. Workers in India owe practically all that they now have in the way of treatment to Sir Leonard Rogers, and the help that he has so ungrudgingly given to everyone who was doing anything for lepers, has been of the greatest value. We all owe much to Dr. Muir, also, for he is continuing the magnificent work that Sir Leonard Rogers did while he was in India, and his advice and experience are always at the service of those who seek his help. I wish, myself, to express my very deep indebtedness to both Sir Leonard Rogers and Dr. Muir for the way in which they have helped me in every way possible during the last few years, when I was Secretary for India for The Mission to Lepers.

Wonderful results.

The discovery of these new curative treatments has brought a wonderful change in all institutions where lepers are cared for. Dr. Isabel Kerr says :—

“ If you can imagine a Hospital, or Home, full of patients

who have good grounds for assurance that by medical skill they have been saved from certain death, then you may have some conception of the mental attitude of our people here.

"Naturally it is very exhilarating to live and work in such an atmosphere, and I enjoy my work better every day."

Everywhere there is a hopefulness that has never been seen before, as the lepers realise that at last there is a hope of their recovering and being able to return to their homes and friends. The treatment is being received not only gratefully but thankfully. I heard of a leper patient who kept the doctor waiting for a little time when his name was called by the Dispensary Assistant. When he reached the room where treatment was given, the doctor asked what was the cause of delay, and the grateful patient begged for forgiveness and said that he had waited to say his grace before having his treatment, so full was his heart of gratitude to God, Who had made known to the doctors this wonderful new medicine that was doing him so much good.

How cheering is the following report which has come from the Rev. R. J. Grundy, Hon. Superintendent of the Leper Asylum at Cuttack, Orissa :—

"Those who have been undergoing the most recent treatments for leprosy have shown very considerable improvement. Up to the present we cannot report any cures, but we hope, in the near future, to be able to report that some have so far progressed as to be allowed to leave the institution."

When I was in India recently, visiting the leper asylums in that country, I myself saw more than 1,100 lepers receiving these new treatments, and

the majority of them were getting better. The ulcers were healing up, the anaesthetic patches were becoming full of feeling again, the faces were regaining their normal appearance, and the general health of the lepers was improving. I was very greatly impressed by the contrast in the condition of the inmates of two different asylums. I first went to one where there were about 90 leper inmates, and 50 or 60 of them had bandages on their hands or feet. Up to that time they had refused to have any of the new treatment, as it had been rumoured amongst them that the new treatment did harm. I then went on to another institution where the treatment was being given to the majority of the nearly 300 inmates. The contrast was most marked. There were hardly any bandages to be seen at all, and the English nurse who was assisting the Doctor said that the dressings did not take her more than 15 or 20 minutes a day. The fact was that practically the only cases that had need of bandages were quite recent admissions.

One of the most striking results of the new treatments is that the general health of the lepers improves wonderfully, and the death-rate decreases. Interesting figures have been obtained from the leper asylum at Purulia, where during the last three or four years the latest treatments have been given to many of the 600 or 700 inmates.

Year.	Total Number of Deaths.				Average per month.
1919	266	..	..	..	22·16
1920	214	..	..	..	17·83
1921	111	..	..	..	9·25
1922 (10 months)	38	..	..	..	3·80

Of course, we know that in 1919 the death-rate was somewhat higher than usual, but we also know that in 1921 and 1922 the new treatments have been given to the majority of the leper inmates. Hookworm has also been treated of late, and this has almost certainly had a little to do with the decrease, but, allowing for all these things, those who know best are certain that most of this extraordinary decrease—for note that it has fallen to about one-sixth of what it was in 1919—is due to the fact that the lepers are recovering, and that is a wonderful thing to see.

At another leper asylum the following took place not so very long ago:—A number of the leper inmates went to the Superintendent and said they were not going to give any more money to the Burial Fund. It appears that the inmates had been in the habit of giving a very small sum each month, probably the equivalent of half a farthing, to some fund from which the grave-digger received a small payment, and the Superintendent asked why they did not propose to contribute any more. He was a little surprised when the reply came—"Why, Sahib, you know that nobody dies now." It really was the case that hardly any lepers had died for some time, and of course the Superintendent said that they need not contribute any more. In this case the death-rate was about one-fifth of what it had been not long before.

At this same institution the Superintendent heard some of the lepers singing at an unusual hour one hot day, and on enquiry learned that they were having a Praise Meeting. He asked what the cause

of thanksgiving was and was a little surprised to receive the reply—" We have met together to praise God because once again we can feel prickly heat." Most people, one ventures to think, return thanks when prickly heat disappears, but the lepers knew that if they once again felt that they had prickly heat, it indicated that the anaesthesia was passing away and they were getting better, hence their hearts were filled with a great joy which could only find fitting expression in the little service which they were holding.

All kinds of wonderful things are now seen in leper asylums. At Dichpalli the lepers regularly play football, badminton, have Swedish drill, and a short time ago they went and asked if they might be allowed to do some manual work, in order that they might earn a little money, and when I visited this asylum I found many of the lepers working at road-making and building.

The results that are being seen wherever the latest treatments are being used are very marvellous. About two years ago I visited the leper asylum at Purulia, and was saddened to see about 40 girl lepers in that institution. What was my delight, however, when I visited Purulia not long ago, to find that six of these girls had apparently entirely recovered and had been allowed to leave the asylum and go and live amongst the untainted children in their special home not far away. Had I been told twelve years ago, when I was myself in charge of a leper asylum, that such a thing would ever be seen, I should have found it difficult to believe, but

that is what is going on in a number of leper asylums in India to-day.

The Rev. G. E. Hicks, who is in charge of the Leper Asylum at Gaya, Bihar, writes :—

“ It should be particularly noted that five of the slightly tainted children, who have been undergoing the latest special treatment, have been pronounced free from all trace of the disease and to their great delight sent away to school.”

Not only at Purulia, but at Dichpalli, Gaya and other places, have those who have been inmates of the leper asylum, some of them for years, been allowed to leave as being, as far as the medical opinion can tell, entirely free of the disease. No outward symptom or sign of the disease could be found, and a microscopic examination of the skin failed to reveal the presence of any bacilli.

Dr. Isabel Kerr, in her medical work among the lepers, pays the greatest attention to small details. Temperatures are taken daily by an English nurse, Miss Mead, who herself attends to any dressings that have to be done, and the lepers are treated as patients. Some 300 have been treated for a considerable period, and no less than 66 per cent. showed “ much improvement,” while $12\frac{1}{2}$ per cent. showed “ All signs disappeared,” and a number of these have been allowed to leave the asylum and return to their homes.

When I last visited Purulia I was delighted to learn that a young woman leper, who had been in the Asylum for some time, and who had received the latest treatment, had been allowed to leave the institution and return to her home. Shortly before

my visit she had written saying that she had been able again to take up her work as a teacher, and for more than a year had remained in the best of health without the slightest trace of any return of the disease. One can imagine a little of what it means to her to be able thus to leave such a place as a leper asylum and return to ordinary life once more.

One of the most heartening results from the use of the new treatment is that the early cases are now coming in to leper institutions and hospitals and asking for treatment. Dr. Isabel Kerr recently made the following statement at a meeting in Glasgow :—

“ Five years ago we had fifty lepers in our home for lepers. To-day we have three hundred and fifty. If you provide the cost of additional wards we might have one thousand or two thousand lepers within a year, so eager are the people to come in and take the new treatments that we can now give them.”

The same story has reached us from many other places. It is now being realised by the lepers that the injection treatments are not followed by the tiresome reactions that they were when they were first introduced, and moreover, they are beginning to meet people who have actually recovered from the disease, and so are themselves eager to obtain like relief. There is nothing that will more greatly help to get rid of the disease altogether than the lepers themselves coming forward and asking for medical treatment. The difficulty so far has been to persuade the lepers, unless they were in an advanced stage of the disease and practically help-

less, to come and be treated at all. If only the early cases could be reached a very great deal might be done in a short time, and it is, we believe, the early cases who are more especially a source of danger to the healthy people around them, as they are specially infective.

Another development is taking place and that is that well to do patients are seeking for admission to institutions for lepers, and are wishing to come as paying patients. At Ditchpalli some special buildings have been erected where there is accommodation, with two or three rooms, a veranda and a small compound, etc., for those who wish to live by themselves. Here they can do their own cooking, and perhaps live with someone who waits on them. This is a development which will grow, but lack of funds has made it impossible to undertake such buildings on any large scale. The experiment, however, is a useful one, and is being watched carefully by those who are working amongst lepers.

These are some of the wonderful results that are being obtained from the use of these new treatments, and Sir Leonard Rogers recently stated :—

“ As the result of my four and a half years' work in Calcutta, of fifty-one cases treated for from three to eighteen months, 40 per cent. cleared up completely, becoming bacteriologically negative, and a further 40 per cent. had so greatly improved that they were likely to clear up in time,”

and I think it should be very clearly stated that these results are being obtained in other places than in India.

The largest colony for lepers in the world is that at

Culion in the Philippines, where some five thousand lepers are to-day segregated on this island by the American authorities. Dr. Wade has recently reported that these new treatments have been used in over four thousand cases among the lepers with very wonderful results. Cases that were treated for six to nine months show improvement in 74 per cent., and those with twelve to fifteen months' treatment show marked improvement in no less than 93 per cent., while a number had completely cleared up.

I have just heard of the wonderful results that have been obtained at the Fusan Leper Asylum in Korea. Three or four years ago it is stated that there were about 300 inmates in the leper asylum, and the average death-rate per annum was 25 per cent. About this time the latest treatments for the disease were introduced, and since then the death-rate has steadily decreased, until last year the death-rate for the asylum, which now has more inmates than previously, was as low as $2\frac{1}{2}$ per cent. per annum, and half the deaths during the year were due to an epidemic of typhoid which visited the district and had affected a few of the inmates of the leper asylum, so that actually the death-rate from leprosy was about $1\frac{1}{4}$ per cent., instead of 25 per cent. a few years ago. Here the lepers enjoy such good health that they are able to undertake considerable building work, while during the last fifteen months no less than a total number of 74 inmates recovered, and, as far as the Honorary Superintendent can tell, were entirely free of the disease, and were allowed to leave the institution. Naturally, the Superin-

tendent is enthusiastic about the treatment and eager to enlarge his institution, that he may have the privilege of giving this chance of recovery to as many lepers as possible.

The most prolonged and extensive trial of the improved methods of treatment is that of the Honolulu American Scientists, where during the last three years there were 310 admissions in all stages of the disease, and no less than 172, or 55·5 per cent. were discharged recovered after critical examination by a board of three experienced physicians, while of 249 discharges during the last ten years, only 12·4 per cent. relapsed, a number of whom cleared up again on further treatment.

Word has recently been received that Dr. E. O. Travers is using a much simpler treatment in his leper work in the Federated Malay States. The Chaulmoogra nut is ground as fine as possible on a curry stone and mixed with a small spiked seed called Pak Chut Lai, and also a hemp seed (Toh Mah Yan), which is steamed dry and ground as fine as possible. These are mixed together in the proportion of two parts of Chaulmoogra nut and one part each of the other two, and a quantity varying from one-half to one drachm is taken by the mouth daily. The two last-mentioned ingredients are grown in China, and it is reported that lepers are able to take a considerable amount of this remedy. There is no troublesome injection to be given. Dr. Travers has had some success with this new treatment and has now returned to the Federated Malay States to make a further trial, and carefully note the results.

Miracles among Lepers.

The late Dr. J. H. Jowett in *The Friend on the Road*, says in a chapter entitled "Sixpennyworth of Miracles":—

"The headline of this meditation is not mine. It belongs to George Gissing. And this is how it occurs: Gissing was going along the road one day, and he saw a poor little lad, perhaps ten years old, crying bitterly. He had lost sixpence with which he had been sent to pay a debt. 'Sixpence dropped by the wayside, and a whole family made wretched. I put my hand in my pocket, and wrought sixpennyworth of miracle!' I think Gissing's phrase is very significant. It suggests how easily some miracles can be wrought. How many troubled, crooked, miserable conditions there are which are just waiting the arrival of some simple, human ministry, and they will be immediately transformed!"

All who have had the privilege of working amongst lepers realize the truth of this, for miracles of all kinds have been seen where a helping hand has been held out to these poor distressed people. It is a miracle to see the hope returning to those who have been hopeless, and this usually happens where an outcast leper, not formally outcasted perhaps, but none the less actually so, being forsaken by friends and relatives, enters an institution where he is cared for, and all his needs are met. It is a wonderful thing to see the smile come back to a leper's face when he finds that somebody cares for him, and is prepared to help him in all his misery. It is a miracle when the leper, who has morally sunk so low, as he often does, and little wonder seeing where he usually has to live, enters into the Home and receives the Christian message. His

life is revolutionized and the bad leper becomes a good leper, and the miracle of a changed life is seen. These are miracles that the friend of the leper has always seen. Now, however, there are other miracles being worked amongst the lepers, for the leper is actually being cleansed of his disease.

This new medical treatment is making a great difference in the Leper Asylums. An Honorary Superintendent of a Leper Asylum writes :—

“ The new treatment has changed the outlook. The people are clamorous for it—the old despair has passed.”

Another writes :—

“ The effect of the treatment on the morale of the Home is nothing less than a miracle. They are 230 of the happiest, jolliest, people you can come across.”

This is perhaps the most spectacular of all the things that are happening in leper institutions to-day, and those who were working amongst lepers a few years ago are astonished at the things that are now being seen.

When I was at Subathu a leper girl, of about 14 years of age, was brought to me, and she told me that, eight or nine months before, the nerves and muscles of her hands had been so affected that her fingers were all drawn into the palm, and she could not use them at all. When I saw her, however, she was able to extend and close her fingers almost as well as a healthy person, and it was a touching thing to see the joy in that child's face as she showed me what she could now do.

On page 18 I referred to Enid, who feared at that time that she was going blind—and so she was. I saw Enid in Calcutta not many months ago and

asked her how her eyes were, and with a very bright smile she said, "Oh, I can see as well as ever I could." And it was quite true, and the reason was that she had received these new treatments. It is only right to say that in other ways Enid was not so much better as one had hoped she might be, but her eyesight was restored, and that was a wonderful thing.

I also referred to Mr. P——. When I last saw him in India he was quite a changed man. His face, which had been so marked that, as he told me, he only dared go out at night, and his friends did not like to speak to him, was practically normal again, and many people would hardly have known that there was really much the matter with him. Before he had the treatment he could hardly walk, whereas now he showed me slight scars left on his feet where the ulcers had entirely healed up, and he was walking as well as ever he did.

There is young Mr. D——, to whom I referred in Chapter I, and who is now so much better that he is looking forward to being able to take up useful work. Although he has not altogether lost all traces of the disease, he is so far better that it is quite likely that he will be able to return to ordinary life before long. Had I myself been told, ten years ago, that such things would be seen within a comparatively short time, I should have found it difficult to believe, but the day of miracles is not passed, and wonderful stories are reaching us from many workers among lepers of the changes that are being wrought, and of the lives that are being re-made, and the happiness of the lepers who realise that they are recovering.

A CURE FOR LEPROSY ?

When one is dealing with a disease like leprosy, with its insidious onset, its prolonged course, and its "stranglehold" on its victim, a disease, moreover, which, as I have already pointed out, has always been said to be incurable, one is very cautious in writing about there being a cure. When, however, all outward appearances of the disease disappear, and on bacteriological examination no trace of the bacilli can be found, and, further, when the patients remain free of the disease for a considerable period, we are surely not claiming too much when we say that a cure has been found for the disease. Let it be remembered that Sir Leonard Rogers has said :— "A few of my first cases have remained well for six to eight years," while American workers in the Philippines record that out of some 70 cases who were allowed to leave the leper hospital about two years ago, so far none have returned. We are, I believe, justified in saying that for the majority of early cases there is a real hope of recovery, which in ordinary language would be called a cure, being accompanied by loss of all traces of the disease. No claim can be made, nor, as far as I know, has it ever been made, that all cases of leprosy can be cured by these new treatments. What is maintained is that many lepers are recovering, and may be called "cures," but one fears that there is little that can be done at present for some of the very advanced cases. Nothing very much, of course, can be done for those who have suffered from nerve leprosy and have lost their fingers and toes, but a great deal

has been gained, even in these cases, when the progress of the disease is stayed, and as far as can be told is cleared out of the system. Lest it be thought that I am too optimistic in writing as I have done, I will quote what Dr. E. Muir wrote quite recently in *The Indian Journal of Medical Research* :—

“ We believe that in all early cases an arrest and retrocession of the disease up to a relative cure may be expected if diet, exercise, and general sanitary conditions are favourable, if the patient does not suffer from any intercurrent or concurrent disease which may lower his resistance or otherwise prevent improvement, and if he continues treatment for a sufficiently long period of time. The deeper, the more widespread and the more longstanding the lesions, the less the hope of recovery ; but given a healthy body, youth, and other favourable circumstances, we think that there is every hope of a relative cure in the majority of cases, even where the disease has become widespread.”

Elsewhere Dr. Muir says :—

“ We have found that most early cases lose all signs of active disease within a few months, if they remain regularly under treatment, and comply with instructions given with regard to sanitation, diet, and general habits.”

Sir Leonard Rogers entirely approves of this statement, and himself speaks and writes about there being a cure, at least in the majority of early cases where the treatment is given for a sufficiently long period.

Medical men rightly hesitate to speak of a cure, but we all feel that the research doctors' work is along right lines, and that before long, perhaps in a very short time, we shall be able to say that there is an absolute cure for all cases of leprosy.

The photographs reproduced are of very special interest in view of what has been written above.

"A CURE FOR LEPROSY."



INDIAN LEPER (an early case)
 BEFORE TREATMENT. (CASE C) AFTER 3 MONTHS' TREATMENT.



INDIAN LEPER (an early case)
 BEFORE TREATMENT. (CASE D) AFTER 6 MONTHS' TREATMENT.

“ MIRACLES AMONG LEPERS.”



LEPER MAN (an advanced case).
BEFORE TREATMENT. (CASE A.) AFTER 2 YEARS' TREATMENT.



LEPER WOMAN.
BEFORE TREATMENT. (CASE B.) AFTER TREATMENT.

Those of the old man (Case A), show the results of the treatment in a long-standing advanced case. Here the treatment had been given for about two years, and the result obtained was wonderful.

The results obtained in Case B are also very striking ; there the treatment had been continued for about the same period.

Case C is that of a young Bengali who was treated by Dr. E. Muir in Calcutta. The second photograph shows the result of three months' treatment. I myself saw this young Indian in Calcutta three months after the second photo was taken, that is after six months' treatment, and to all outward appearance he was free of the disease. His face was quite normal again.

The fourth case (Case D) is also that of a Bengali young man, and the second photograph shows the result of six months' injections. He, also, is one of Dr. Muir's cases.

I suggest that these photographs fully confirm the opinion that, in ordinary language, we have a cure for leprosy.

CHAPTER VI

THE LEPER PROBLEM

The Problem stated.

THE real problem before us is how to get rid of leprosy altogether. We believe that this can be done, and although there are a very large number of people suffering from leprosy in India, the number is not so great that the question cannot be resolutely faced, and a real attempt made to deal with it.

It is, of course, admitted by most authorities that the number of lepers recorded in the Census is not a really accurate index to the actual number of people suffering from the disease in India.

Sir Frank G. Sly, Governor of the Central Provinces, wrote a short time ago as follows :—

“Leprosy is widely prevalent in the Central Provinces, particularly in the Chhattisgarh division. In the latter tract the number of lepers recorded at the census of 1911 was ninety-six per hundred thousand, and there is good reason to believe that this is a serious understatement owing to concealment of the disease, the real incidence being put by competent observers as perhaps twice the recorded incidence. The leper problem is thus one of great magnitude and importance.”

Dr. E. Muir, writing in his *Handbook on Leprosy*, and referring to the Census figures of 1911, says :—

“ Those of us who have seen much of leprosy in India know that the number must be very much larger. This figure (109,094) probably includes only advanced cases, as many early cases are not themselves aware that they are suffering from leprosy, and those who are aware do not consider it in their own interest to disclose the fact. At our leper clinic held at The School of Tropical Medicine, enquiries were made of each patient whether his or her name had been entered in the Census forms which had been filled up in the week previous. Out of 30 only two had been entered as lepers, although many of the others were obviously lepers from their outward appearance. Many of them said that the questions of leprosy was never asked by those who filled up the Census forms. It is thus seen that the Census returns are absolutely useless for the purpose of estimating the number of lepers in India. We think it would not be an over-estimate to put down the number of lepers in India somewhere between a half and one million.”

It is well to note where leprosy is most prevalent in the Indian Empire, and the following table compares the figures from the 1921 Census with those from that of 1911.

<i>Province.</i>	Number of lepers per 100,000 of the population	
	1921.	1911.
Burma	74	58
Assam	56	62
Central Provinces	50	46
Madras	37	40
Bombay	36	38
Bengal	33	38
Bihar & Orissa	32	46
United Provinces	27	30
Punjab & Delhi	11	13
N.W.F. Province	9	12

<i>Native States :</i>	Number of lepers per 100,000 of the population.	
	1921.	1911.
Travancore	51	33
Cochin	48	50
Kashmere	46	43
Hyderabad	34	28
Baroda	26	22
Central India & Gwalior ..	15	14
Mysore	5	13
Rajputana & Ajmere ..	4	6

The average number for the Indian Empire is 32 lepers per 100,000 of the population.

These figures are of great interest, and it is well to call attention to the fact that Burma now unenviably heads the list instead of Assam, while Bihar and Orissa, instead of being bracketed third as it was in the 1911 Census, has now dropped down to the seventh place. Attention should be called to the fact that Bihar and Orissa has 10·7 per cent. of its lepers (recorded in the Census) in leper asylums, while Burma only has 5·8 per cent. in leper institutions. I think it should also be pointed out that Assam has only 1·5 per cent. of its lepers in leper asylums.

Leprosy is prevalent all over India, and the total number as suggested by Dr. Muir is a large one, even if we take the half million figure, but as Lord Willingdon wrote some time ago :—

“ The leper problem is important out here, and is further a matter which *can* be grappled with.”

All workers amongst lepers will agree with this, and we are strongly of opinion that if something can

only be done now, the problem can really be solved in a comparatively short time. We are to-day facing a new position altogether, and there are wonderful possibilities before those who will dare to resolutely tackle this age-long problem. If it is to be done, vision is needed. There must be faith in the means that are available and a real belief that something can be accomplished.

There IS a problem to be faced, and this must be stressed. It has already been pointed out that there are not more than 9,000 lepers in all the leper institutions in the whole of India, and this is about 4 per cent. of the number given in the very conservative estimate which has recently been published by The British Empire Leprosy Relief Association, namely 200,000. It must be realised that very little indeed is being done in India for lepers, and it is true to say that it is practically only the advanced cases who are now in the asylums. One knows, of course, that there are difficulties to be met. One is the difficulty of diagnosis. Without any doubt many lepers contract the disease and are not aware of the fact for, it may be, two or three years, and only an expert medical man would be able to detect, after close examination, that there was anything amiss with the patient. Not very much has been written on this question of diagnosis, and not all medical men, European or Indian, have been able to diagnose this disease in its earliest stages. Now, however, that instruction is being given in all the medical schools, this will not be so great a difficulty in the future. Another difficulty is the inaccessibility of a very large number of the

early cases. They live away in small villages where there is little medical help available, and where, on account of there being little discomfort in the early stages of the disease, the patient is unwilling to undertake a journey, or put himself to much trouble in order to consult a medical man. Many early cases also are hidden away in the zenanas, where there is little chance of women or children receiving medical attention. This also, one is glad to say, is a matter in which there is a great deal of improvement evident, and it is believed that before long medical help of some kind will be available for most of the people, and if the coming generation of doctors are instructed in the diagnosis and the treatment of the disease, a very great deal will be accomplished. It cannot too often be pointed out that we only have to deal with the present generation of lepers. If they can be dealt with, the disease will be stamped out in a comparatively short time.

One of the difficulties that had to be met with was the old " Lepers' Act " which was of very little value. It was so worded that only a leper who was in the ulcerated stage of the disease could be compulsorily segregated. This was a serious defect, as it enabled lepers who were dealt with by the police to demand release from the leper asylum as soon as their ulcers had healed up. I was informed by a high authority in Calcutta that a number of the begging lepers in that City had been in and out of the Government leper asylum twenty times. They were time after time arrested by the police authorities and sent to the leper asylum as they were in

an ulcerated condition, but as soon as they had been there for a few months they became a good deal better in general health and the ulcers healed up. The lepers then, not liking the strict discipline of the asylum, and knowing that technically they did not come within the meaning of "a leper" in the "Lepers' Act," demanded release, and had to be allowed to leave. The result, of course, was that the Act fell into disuse in all parts of the country, and it was in Calcutta only that any serious attempt was made to use the provisions that there were in this Act. The Amended Lepers' Act of 1920, however, was differently worded, and is now a very useful piece of legislation. It has been so drafted that any person who is a leper, in any stage of the disease, and who is begging in public, or doing certain work, may be compulsorily segregated.

The suggested solution.

I wish to re-emphasise the fact that leprosy is "contagious only," and this has been admitted by all the important Conferences on leprosy in the past :—

1. The Berlin Conference of Leprologists (1897).
2. The Bergen Conference of Leprologists (1909).
3. The Far Eastern Association of Tropical Medicine (1910).
4. A French Commission (Academy of Medicine) (1914).
5. The Calcutta Conference on the Leper Problem (1920).
6. The Strashourg Leper Conference (1923).

As this is admitted, and all experts agree that leprosy is not hereditary, it surely means that a solution of the problem is possible.

Two courses must be followed. The segregation of lepers must be encouraged and the present treatment for leprosy must be improved and made available for every leper in the country.

From the earliest days it has been realised that segregation was a right method to adopt. In the Old Testament scriptures we learn that the segregation of lepers was rigorously applied in the case of the Jews. It is graphically stated "Without the camp shall his habitation be." Apparently the leper was completely cut off from all communication with his fellows, and only allowed to return if he became free of the disease.

A ruthless type of segregation was in vogue in Britain in the Middle Ages, when lepers were driven from their homes and a burial service was read over them by the priest, this even including the sprinkling of earth upon the leper, and he was not allowed to come anywhere near other people. In those days, also, leprosy houses were common, and it has been said that there were at least 112 of these Homes for Lepers in Great Britain, the first of which was erected in Canterbury in 1006, and there were two thousand in France.

It is generally admitted that the segregation of lepers is one of the most effective measures that can be used to bring about a decrease in the numbers of lepers. Reliable statistics are now available, and there are several well-known examples which may be quoted. Leprosy was extremely

prevalent in the Hawaiian Islands. The disease was most probably brought by the Chinese, and rapidly spread, so in 1865 the authorities adopted the policy of segregation. The official report says :—

“ In 1870–74 the disease reached 10·88 per thousand of the inhabitants of the islands, and in 1890–94 it was at its maximum of 11·88. Since that time it has steadily declined to 2·96 per thousand in 1911–15.”

Another report says :—

“ Leprosy in Hawaii is relatively and actually on the decline. This satisfactory result is primarily to be attributed to the effective plan of segregation at Molokai.”

The same report, that of the United States Senate, says :—

“ The results achieved at Hawaii find their parallel in Norway. Under a policy of segregation the leper rate has been gradually reduced,”

and the following figures are given :—

Year.	Lepers per 100,000 in Norway.		Lepers per 100,000 Segregated.		Percentage Segregated.	
1856	191·3	..	15·7	8·2
1875	97·1	..	34·5	35·6
1885	61·9	..	27·0	43·5
1890	48·4	..	25·5	52·7
1895	33·3	..	17·4	52·2
1900	25·7	..	13·3	51·8
1905	20·4	..	10·9	53·4
1910	13·5	..	8·5	63·0

The latest information available shows that in Norway, by the year 1921, the incidence had been reduced to only 6 per cent. of the numbers in 1856, although “ there is strong evidence that the disease at that time was on the increase.” In the case of

Norway, particular attention has been given to isolating the more infective tubercular cases, while a number of the not very dangerous nerve cases were allowed to be kept at home with special precautions, and under close medical supervision, and the results prove that a great deal can be accomplished by persistence in carefully considered prophylactic measures.

A great deal has been written on the question of whether the segregation of lepers on the island of Culion, in the Philippine Islands, by the United States Government, has really resulted in reducing the incidence of the disease. This settlement was formed in the year 1906 under the excellent supervision of Dr. Victor Heiser, and it seems to be admitted that within the next ten years there were clear signs that the number of lepers was being reduced. The project, however, has not been carried through as it was originally planned, largely owing to the political difficulties in the Islands, and the regular segregation of new cases as they were discovered, as was originally intended, has not been kept up. Notwithstanding this, most authorities, I believe, would agree that segregation has a real effect in reducing the number of lepers, if it is carried out properly.

There are two kinds of segregation that are already in operation in India, one the voluntary segregation of lepers, and the other the compulsory segregation by Government authorities. Both methods are necessary, and both should be encouraged. The existing leper asylums in the country should, as far as possible, be kept for lepers who will volun-

tarily segregate themselves. The majority of these institutions, as I have already pointed out, belong to, or are connected with, The Mission to Lepers, and it is not advisable that begging or other lepers should be compulsorily segregated in these asylums. The voluntary institution has its part to play in the complete scheme. It would be wise, from the economical standpoint, if the smallest of these voluntary asylums were closed, and if the work were concentrated in larger institutions. I believe that asylums which are managed by an Honorary Superintendent, probably a Missionary, can be most efficiently and economically managed if they have between 300 and 500 inmates. Asylums of this size can be managed with a comparatively small staff. There is, of course, no reason why an asylum for voluntary lepers should not have as many as 1,000 lepers in it, but in that case it would mean the whole time of a Superintendent. The Provincial Governments all make Maintenance Grants to such institutions and these should be continued, and in some cases enlarged, and it would be well if the Native States could give grants to such asylums.

It should here be noted that the Calcutta Conference on the Leper Problem, held in 1920, unanimously passed the following findings :—

3. " That as far as possible segregation should be of a voluntary character as is now carried out in the asylums of The Mission to Lepers, except as is hereinafter recommended in the case of pauper lepers under the Act.
4. " That it is our considered opinion that the present type of Mission Asylums, with sympathetic

Christian management, affords the best means of effecting a voluntary segregation of lepers."

The other type of asylum is that in which lepers are compulsorily segregated. These institutions should be planned as leper settlements or colonies, such as "The Lady Willingdon Leper Settlement" that is now being built not far from Madras. These settlements would be only for those who came within the scope of the Act, that is, they would be for pauper lepers who had no proper means of support, or lepers who refused to refrain from doing certain things which are forbidden by the Lepers' Act.

By a settlement we mean a place where there is as much as possible the idea of community life. We consider that the settlement shall be so attractive as to make the pauper willing to remain there without too many restraints being necessary. It must have the best wards that can be designed, both for comfort and for sanitation; it must have the best medical attention available, so that the early cases who would be taken in should have the best chance of getting rid of the terrible disease which afflicts them. It should have provision for the entertainment of the inmates.

A settlement should be planned to accommodate at least 1,000 lepers, male and female. Enough land, probably about 500 acres, should be taken so that there would be good plantations in which the more healthy lepers could work, and so provide at least some of the food they would consume. Extensive gardens should be laid out in which a regular supply of vegetables could be grown. Land would

be needed for the cows, and good buildings also required for dairying. There would be a Central Hall, a Hospital for advanced cases, a Dispensary where treatment would be given, School buildings for the young people in the Asylum, Recreation Rooms where the lepers could amuse themselves, and there would have to be provision for those who were unfortunate enough to contract some infectious disease.

A good water supply would have to be provided and most probably an electric light plant. There would be a refuse destructor and possibly a crematorium. A good deal of attention would be given to the question of drainage.

In such a settlement the lepers would live. Work of other kinds, beside plantation work, could be introduced and I think it would be quite possible to make enough clothing, weaving of the cloth included, to keep the inmates supplied. Shoes could be made by those who were used to such work, and it is just possible that some simple industries could be started in which the products could be disinfected and used outside the asylum. All such work done would be paid for, and in this way the inmates would be kept from thinking too much about their miseries, while it would help keep down the cost of maintenance if a good many of their needs were supplied by themselves.

Both male and female lepers would live in a settlement. There would, indeed, be four different sections in the settlement. One for single male lepers, another for single female lepers; a third for married lepers and a fourth for the healthy staff.

To such a settlement would be sent the begging and pauper lepers, who are to be found in such large numbers in some of the cities, and are met in most parts of India. I do not think it would be an over-estimate to say that there are at least 50,000 of these pauper and begging lepers in India, and I have no hesitation at all in saying that the majority of these should be cared for by the State in a number of settlements, perhaps one central one for each Province. It is more than possible that a considerable number of these lepers, who would be compulsorily segregated, would, after receiving the new treatment, become free of the disease, and the most advanced of them at least non-infective, and they would then remain a charge on the State, and ought to be provided with a Home, and the leper settlement would be the proper place in which they could live. They could be given useful employment, and the cost of keeping them would not be a large one. Whatever happens they should not, if they appear to get rid of the disease, be sent out and allowed to again take up their life of vagrancy. Nothing would be more likely to bring on a relapse of the disease than such treatment.

It will, of course, be accepted by all that the very latest treatment for the disease must be provided by highly-trained workers in the institutions, whether for voluntarily or compulsorily segregated inmates. The day is past when it is sufficient to take in lepers and be satisfied when they are fed and clothed, and now that we have really reliable treatments that can be given, these must be provided. All medical workers in institutions for

lepers should be most carefully trained in diagnosis and the latest treatments that are available, and in this connection it should be noted that Dr. E. Muir has been doing very valuable work in Calcutta. I think I ought to acknowledge the very valuable assistance that the Government of India gave me when I proposed trying to arrange for the very necessary piece of work of specially training Indian medical assistants who were working in leper asylums. The late Viceroy, Viscount Chelmsford, warmly approved of this scheme when I placed it before him, and the Government of India provided funds which paid all the expenses of those who journeyed to Calcutta, where Dr. Muir gave them special training in the use of the treatments.

It has been suggested that a special course of lectures should be given to all medical men and women who have anything to do with lepers, and I understand that a small beginning is being made, in connection with the School of Tropical Medicine in Calcutta, to provide such a course of lectures.

Thus far we have outlined the provision which ought to be made for needy lepers who will voluntarily segregate themselves, and for those who should be compulsorily segregated by the Authorities. It is quite possible, indeed most probable, that the larger number of lepers in India are found in the homes of the people, and for these, of course, no provision is made at all in leper institutions, nor can many of the lepers be expected to go to such places. On the other hand, it is most necessary, if the problem of getting rid of leprosy is to be solved, that the very latest treatments should be made avail-

able for all such people, and that they should be urged to attend where the treatment is given. We are inclined to think that the best solution is to provide special clinics for lepers in large centres. It would not be wise to consider providing the treatment for leprosy at all hospitals, as patients suffering from other diseases would most probably object to attending if lepers in large numbers were also present. That such clinics are successful is being proved by Dr. Muir in Calcutta, where he has a weekly attendance of about 100 lepers, who come to him as out-patients. These are mostly the early amenable cases which clear up before they have infected many of those among whom they live.

When I was in Patna towards the end of 1922, I there visited a leper dispensary which had been opened in April of that year. There were three patients to commence with, but I learned in February of this year that there are now about 300, although I believe that not all of the 300 are lepers, but a very large number of those who attend suffer from that disease.

Mr. E. A. Johnson, writing on leper dispensaries in the *Servant of India*, says :—

“ With regard to leprosy in the other districts of the Province (Bihar and Orissa), the treatment is being given in the out-door department of the Sadr Hospitals at Monghyr and Balasore, and the Pilgrim Hospital at Puri. In the Darbhanga and Puri districts the treatment is available at the District Board Dispensaries. A meeting of the inhabitants was recently convened at Bhubaneswar, and funds were collected for the purchase of medicines for the lepers.

“ It will probably be found that when a Leper Dispensary

is opened in Calcutta, the difficulties will disappear. The Patna Dispensary began with a grant of only Rs. 1300 ; although the work has increased enormously, funds have always been forthcoming. The Ministers have made grants, and generous donations have been received from the public. A similar institution has recently been opened at Karachi."

This report is very encouraging, and seems to show that leper clinics are being, and can be, made a success. Word has just reached me from Dr. Isabel Kerr, that she has opened a clinic for lepers in Hyderabad, and she speaks very hopefully of the prospect, as, although this work has only recently been commenced, lepers are beginning to present themselves for treatment in considerable numbers.

I think that the treatment should also be provided for out-patients at leper asylums and leper settlements, as the larger the number of lepers that can be treated, whether as in-patients or out-patients, the sooner shall we be able to get rid of the disease.

One other matter must receive consideration as plans are being made to tackle the leprosy problem in India, and that is, what steps shall be taken to save the children of lepers from contracting the disease. The Mission to Lepers has been dealing with this delicate problem for many years, and has had considerable success in persuading the leper inmates to allow their children to be cared for in separate Homes for Untainted Children. These Homes are in most cases situated not far from the leper asylum, and the parents are allowed to see their children from time to time, but the children are, for the most part, kept away from all possible contact with lepers, and in a large majority of cases

grow up quite as healthy as ordinary Indian children.

Where the leper inmates, as in these cases, are voluntary inmates, no compulsion can be used in dealing with the children. The situation is somewhat different, however, when we consider the question of the healthy children of lepers who are in a leper settlement. My own opinion is that the healthy children should not be allowed to live with their parents, and I think that if a home for these healthy children is provided not far from the settlement, and the lepers are assured that they may sometimes see their children, most of them will be quite willing to allow their children to go to the Home. Lepers who are married might be allowed to live together on the condition that if there are any children born these should, as soon as possible, be sent to the Home, and kept away from possible infection. If the married lepers would not agree to this, I would suggest that they should not be allowed to live together.

Sir Leonard Rogers recently wrote :—

“ We conclude that children are specially susceptible to the disease, and ought, therefore, to be especially guarded against exposure to infection.”

There is very little doubt that this conclusion is correct, and the problem of protecting the children of leper parents, when the parents are well to do and live in their own homes, is one that needs serious attention. Public opinion on this question needs to be developed, and it is possible that if the matter was dealt with in a sympathetic manner, and the well-to-do lepers were advised as to how

to prevent those around them from becoming infected, a great deal might be done to minimise the danger. The example of Norway, where this matter was very carefully thought out and dealt with, would be a most helpful guide to those who have to deal with the problem, but there certainly should be no difference of opinion on the question that something ought to be done to protect the children.

Dr. E. Muir has given a considerable amount of thought to this particular side of the question, viz., that of protecting the healthy public, and I take the liberty of quoting what he has written :—

“ The following precautions should be observed by all lepers :—

“ (1) They should live in separate rooms, use separate eating utensils, keep their clothes apart and sterilise them by boiling them for half an hour before sending them to be washed.

“ (2) They should avoid using public vehicles unless satisfied through competent medical advice that they are not in an infective stage of the disease.

“ (3) They should fully consider the dangers of parentage in the light of what is discussed above.

“ (4) They should be most cleanly in their habits of life and should studiously avoid doing anything which could lead to the dissemination of the germs of the disease from their own body to that of another.”

Sir Leonard Rogers has recently pointed out the necessity of watching closely for several years all unhealthy contacts of any discovered leper, in order that the early signs of the disease may be detected while it is yet curable. Those who have lived in the same house with a leper should be medically examined every three months for three or four

years after exposure to infection so as to prevent the extension of leprosy.

To sum up what has been suggested as the methods to be used in solving the leper problem in India, they are :—

(1) That the existing institutions for voluntary inmates should be increased in number and size.

(2) That central leper settlements should be built in each Province for compulsorily segregated lepers.

(3) That special clinics for leper out-patients should be established in all large centres.

(4) That the children of leper out-patients should be specially cared for and protected.

(5) That the latest treatments should be improved and in any way possible made available for every leper in the country.

If these steps were taken, and a united effort made by existing organisations, by the Government, and by the public, the leprosy problem in India might be solved within a comparatively short time, and the great Indian Empire be rid of this terrible disease.

CHAPTER VII

THE LEPERS' CHALLENGE

"Please let me come in."

EVERY one who has seen a leper has been deeply stirred by the sight. The leper moves to pity as no other sick man does. His sufferings, his sorrows, his loathsomeness, strike a sympathetic chord in the heart of even the most callous, and I have myself never met any one who has seen a leper who has not expressed sorrow that there are so many lepers, and that they suffer so greatly. The need of the leper is so tremendous that it is a direct challenge to action to those who are not afflicted in a like manner.

During the last few years I have visited some fifty leper asylums in India, and everywhere I have been deeply moved by the sufferings of these poor people. Practically every large institution for lepers in the whole of India is overcrowded, and let it be remembered that 95 per cent. of the inmates are there because they have chosen to enter the institution.

Sir F. Sly, writing about the condition of leper work in the Central Provinces, wrote:—"There is much overcrowding, the place and equipment being inadequate for the present number of inmates." And this is only too true. The fact is that the larger

leper asylums are so popular with the destitute lepers, and more than ever has this been the case in the last few years, that conditions in some institutions are not at all satisfactory. The little rooms in which the lepers live in the leper asylums are usually 12 or 13 feet square and they are built to accommodate four lepers. In quite a number of large asylums, however, I have found that numbers of lepers were living five in a room, and it can readily be understood that this is not at all good for the general health of the inmates when they are crowded together in such a manner. And yet what is to be done? When the needy leper comes to the asylum and begs for admission, can it be wondered that the kind-hearted Superintendent does all that he can to make room for the new-comer, and when the old inmates, who appreciate so greatly the benefits that they receive, see that other of their fellow-sufferers, almost naked and semi-starving, are asking to be admitted, they quickly respond to the suggestion of the Superintendent and re-arrange their little beds so as to make room for another occupant of the room? The reason for this being necessary is not far to seek. The fact is that the agencies carrying on leper work in India have far more that they wish to do than their funds will permit them to undertake, and one could wish that large sums might be put at the disposal of The Mission to Lepers and other agencies in order that adequate accommodation might be provided.

I have the privilege of personally knowing the Honorary Superintendents of all the large leper asylums in India, and many of them have told me

of the painful scenes witnessed at their asylums when they have to refuse admission to lepers asking to be taken in. The following extracts are taken from letters received from Honorary Superintendents of leper asylums in India, and they speak for themselves :—

“ The Home is full now and practically every week lepers who come begging for admission have to be turned away.”

“ There were thirty-two people admitted last month, and more than that number turned away.”

“ This morning I had to refuse admission to five lepers and their children, two tainted and six untainted. The asylum is packed to the full.”

“ I have begun to turn lepers away. It is a hard job to which I shall have to get accustomed.”

“ I have sent away from the asylum some thirty lepers who have applied for admission since the Asylum has been closed to admitting new lepers.”

Sad indeed is it when lepers must be refused admission, but even overcrowding must have its limit, and it only stresses the need for more accommodation being provided and a larger number of institutions built for these people who so sorely need help.

The desire of the leper for admission to a home where he may be cared for is a challenge that ought to be met. To meet this challenge will involve, in a number of cases, very considerable enlargement of existing institutions, and it may be necessary to build an entirely new asylum on a fresh site. This has been found necessary at Dhamtari, in the Central Provinces. The ground on which the old asylum was built was not nearly large enough, and when

it was proposed to take in a much larger number of lepers, it was thought advisable to build a new, large, up-to-date asylum on an entirely fresh site, four or five miles away. A splendid piece of land in the open country was purchased, and the new asylum is being built on a plan that is a great improvement on many of the plans that have been used in the past. In this case it is probable that 500 lepers will ultimately be provided for in that one Home.

If larger numbers of lepers are to be cared for, I believe that asylums will have to be built in quite a number of new centres. From the 1921 Census we know where the need is greatest, and the whole matter should be carefully considered by Provincial and local authorities, and adequate plans made to meet the situation. This is primarily a question that concerns local bodies, and where there is a need for a leper asylum to be built, a local committee of Indians should be formed and subscriptions raised for the purpose. If this were done, and it was recognised that local opinion was really in favour of something being done and local people were ready to do their share, the Provincial Government would certainly be willing to make grants for building purposes, and for the maintenance of the lepers when the Home was open. Any such new Homes will be most successful if there is a strong local committee which will really take an interest in the Institution. A good deal of the success of the Ackworth Leper Asylum, Matunga, Bombay, is due to the fact that successive Commissioners of Bombay, other European and Indian Officers, and

Indians of standing in the community, have been willing to join a committee and really take an interest in what was being done. This particular asylum is, in my judgment, the best kept asylum, as far as the grounds are concerned, that I have ever seen, and I think it is largely owing to the fact that it has been continually visited by members of the local committee.

Then, also, as I indicated in the previous chapter, if the challenge of the leper is to be fully met, the Provincial Government must build the leper settlements which will be needed if the pauper and begging lepers are to be compulsorily segregated. Every Indian official whom I have had the pleasure of meeting has taken a keen interest in any proposals that have been placed before him for leper work, and now that Indian Ministers are responsible for looking after the health of the community, it is to be hoped that serious thought will be given to the problem of the leper.

"Please give me the treatment."

Not only are lepers in large numbers seeking for admission to the existing institutions, but considerable numbers of the lepers in the institutions are asking for the new treatments, and I am doubtful if more than 25 per cent. of the total number of inmates of all the leper asylums in India are receiving the latest treatments. One reason for this is that it is only within the last three or four years that a treatment has been available that has really done much good, and it was felt at first that it was best to try the new treatments on a limited number

of lepers. This is what I myself arranged when in 1919 I planned for the trial of the new treatment at thirteen different leper asylums. Now that the treatment has been proved to be a success it should be used amongst all lepers, but so far the treatment has been rather costly. A little more than a year ago Dr. Isabel Kerr told me that she thought it cost about £1 per annum, taking all costs into consideration, to give the new treatment. This was quite a serious item of expenditure, and funds were not available then for using the treatment on a wide scale. At that time there was also the difficulty that a number of lepers did not like to take the treatment because of the reaction, but this is not the case to-day. Dr. Kerr has said that practically all the lepers in the leper asylum at Dichpalli are glad to take the treatment, and when I last visited Calicut and Manamadura in Southern India, quite a number of the lepers begged to be allowed to have the treatment. Up to that time it had only been given to a limited number.

If it is a question of money not being available for the giving of the new treatment to those who are asking for it, then, indeed, we are in a sad plight, and one hopes that funds will be forthcoming that the leper who begs for a chance of getting better may not beg in vain. Surely none would deny a leper such a chance when it is remembered that a number of lepers are actually recovering from this awful disease.

Reference has already been made to a much simplified method of treatment now being tried by Dr. E. O. Travers in the Federated Malay States.

If this treatment is really successful it will make it much more easy to meet the challenge of the leper, who asks for treatment for the disease. Dr. Travers says :—

“ It should be the object of every community where leprosy occurs, to provide a comfortable home where lepers can be well looked after, and where not only can they be intelligently treated, but employed and amused. This having been arranged, every effort should be made to educate the public in the early signs of the disease. When it is generally understood that, if taken in time, the progress of the disease can be arrested, and that in a large proportion of cases leprosy can be actually cured, there is no doubt but that the lepers will come for treatment directly they realise that they are afflicted with the disease. The importance of this cannot be too greatly emphasised, and I am convinced that when we are in a position to treat leprosy from an early stage, we shall be able definitely to cure the disease.”

“ Rid India of leprosy.”

This is the third element that enters into the challenge of the leper that faces us to-day. He not only asks for admission, he not only begs for treatment, but he demands that we shall get rid of the disease altogether so that those who follow him may not have to face the possibility of contracting such a dread malady.

And it can be done ! Of that there is not the slightest doubt if only the right steps are taken now, and the proper plans are made. This view, that a country can be rid of leprosy, is shared by others who are working among lepers.

Dr. W. S. Goodhue, of the American Health Service, and one of the doctors in charge of the leper

work in the Hawaiian Islands, speaking to members of the Legislature who were visiting the Leper Settlement on Molokai in 1921, declared :—

“ With two years' chaulmoogra oil treatment I believe that 65 per cent. of the chronic cases of leprosy on Molokai can be cured.” And, “ within ten years,” he added, “ all cases should be cured, and Kalaupapa be abandoned as a leper settlement.”

Possibly this worker might be considered to be too optimistic, and yet the number of lepers to be dealt with is comparatively small, and one can only hope that the work will be so undertaken that, if it is at all possible, the end in view may be attained in these beautiful Hawaiian Islands.

We say, then, again, “ It can be done.” It is surely a desirable end ? On that point there will be no discussion, and it is a national duty that, if it can be done, India shall be rid of leprosy. King Edward VII wisely said of another disease, “ If preventable, why not prevented ? ” and to-day we say with reference to the problem of the leper, “ If India can be rid of this disease, why is it not done ? ”

The great need is for concerted action. His Majesty King George V, in his speech at the opening of the British Empire Exhibition at Wembley, said :—

“ This Exhibition will enable us to take stock of the resources, actual and potential, of the Empire as a whole ; to take counsel together how the peoples can co-operate to supply one another's needs, and to promote national well-being. It stands for a co-ordination of our scientific knowledge, and a common effort to overcome disease and to better the difficult conditions which still surround life

in many parts of the Empire. Think, for example, of the scientific work accomplished in recent years for the prevention and treatment of tropical diseases."

Whether His Majesty was actually thinking of the new cure for leprosy one does not know, but one realises the truth of what His Majesty stated, and many feel strongly that the time has now come to make "a common effort and overcome" leprosy.

The Central Government in India has, by the amended legislation of 1920, made it possible for all provincial Governments to deal with the pauper and begging lepers, and Provincial Governments must do their share in providing settlements for the lepers who now come within the scope of this Act, and who ought to be compulsorily segregated. Provincial Governments should also provide adequate funds for all agencies that are engaged in, or would undertake, leper work. The Mission to Lepers ought to be placed in a position, through increased help received in the home lands, as well as by Government aid in India itself, to enlarge its existing institutions where necessary, and to build others if it is deemed that this ought to be done by the Mission.

The Rulers of Native States should be encouraged to systematically tackle the leper problem in their own territory, for they lag somewhat behind the Provinces in respect to the amount of work being done for lepers, while, on the other hand, they are, in some respects, in a better position, financially on account of the smaller number of lepers to be provided for, to deal with the matter, and the general Indian public should be encouraged and urged to

subscribe from private funds money that will be available for dealing with this disease in a comprehensive manner. When Lady Chelmsford was Vicereine in India and issued a public appeal asking for gifts for leper work, quite a good response was made by the general public, and one is quite sure that if the matter is only placed before wealthy Indians they will liberally respond, while I am certain, from my own experience in India, that business firms, whether British or Indian, will do their share.

For some time it has been felt that there was the need for co-ordinating the existing work being done amongst lepers, and also for organising new work, and recently the British Empire Leprosy Relief Association was formed in London. H.R.H. the Prince of Wales is President, Viscount Chelmsford is Chairman of the General Committee, Sir E. A. Gait is Chairman of the Executive Committee, Sir Frank Carter is the Honorary Treasurer, Sir Leonard Rogers is the Honorary Medical Secretary, and the writer has the honour of being the General Secretary. H.R.H. the Prince of Wales sent the following message which was read at the inaugural meeting of the Association held at the Mansion House, London, on the 31st of January :—

“ As Patron of the Association His Royal Highness desires to convey to the Committee his earnest hope that the meeting at the Mansion House on January the 31st may be in every way successful, and that the necessary funds may be forthcoming to enable the Association to carry out its work thoroughly and completely. The elimination of leprosy from the British Empire is a wonderful ideal alike for British Medical Science and for British

Administration. His Royal Highness is confident that this ideal can be realised if the Association is accorded the support it merits."

His Excellency the Viceroy sent a message as follows :—

" I was greatly impressed during a recent visit to Calcutta by the wonderful work being done for the lepers in India, and by the great hopes for alleviation and cure which the new treatment for leprosy holds forth.

" A great field awaits this labour of mercy in India. The latest census returns show 102,513 persons suffering from leprosy in India and Burma; and it is more than probable that ignorance or a desire to conceal the disease has vitiated the accuracy of the total, and that the number of those suffering from the disease is considerably in excess of this figure. I am convinced by the good results obtained in India from the new treatment, that the time is auspicious for an earnest campaign to combat this terrible scourge. I shall follow the progress of the movement with profound sympathy, and with the earnest desire that it may achieve the fullest measure of success not only in India, but throughout the Empire."

An appeal for financial help for carrying out the campaign of the Association has been issued, and many people in Great Britain have already responded. It is, however, felt that the leper problem in India is one which should be dealt with in India, and His Excellency the Viceroy has recently proposed that there should be an organisation in India, closely connected with the British Empire Leprosy Relief Association at home, with an Indian Council and local Committees. An appeal for financial help is to be issued and the whole subject is to be very carefully considered, and it is hoped that this will result in the problem of

leprosy in India being faced in quite a new way, and if this is done there is no reason at all why we should not rid India of leprosy within a comparatively short time—say 30 or 40 years. It cannot be too frequently stressed that segregation is an effective measure which results in the reduction of the incidence of the disease, that leprosy is not hereditary, and that the disease is now curable, and taking these three things together it is quite a practical proposition to speak of getting rid of the disease, and once India is rid of leprosy care can be taken that it is not re-introduced from the outside, and if occasional cases do enter they can be segregated and treated.

It will be a very wonderful day when India, burdened as she is to-day with such a very large number suffering from this disease, is able to say that here leprosy is a thing of the past. Let it not be forgotten that there is a very great economic loss to India to-day because of the large number of begging and pauper lepers who have to be supported by the general public. If leprosy is banished, not only would the money spent in keeping the poverty-stricken lepers be saved, but many of the lepers themselves would become useful and producing members of the general community.

Dr. D. L. Joshee writes :—

“ Nandikolla Appana, with his son and daughter, who have both been pronounced ‘cleansed,’ are now living outside the Observation Ward, and are earning their own living by carpentry and teacher’s work.”

He goes on to quote a number of cases “to all appearances cured,” telling what each case is now

doing. One has returned to College at Bangalore, another is learning compounding, and another is being taught carpentry, another has re-entered a boarding school and another has married. These are a few cases only but are typical of what is happening in other parts of India, and what will happen on a large scale when the new treatments are made widely available. Lepers who now are a burden on the community will be able to provide for themselves and do really useful work.

For financial as well as health reasons, therefore, this matter should be taken up as soon as possible. Humanity calls us to care for all who are in need, and surely the lepers are the most needy people who can be found anywhere. It is a Christian duty to care for the leper, for was it not Jesus Christ who gave the distinct command "Cleanse the Lepers"; and statesman-like forethought should urge us to use every endeavour to see that this disease is no longer allowed to take such toll from the people of the land. As leprosy smites men and women and children of all classes in the community in all parts of the Indian Empire, all should be ready to combine to care for, and, if possible, cure the sufferers, and ultimately to secure the elimination of leprosy from the land.

It can be done. God grant that it may be done in our life-time.

APPENDIX A

INDIAN LEPERS ACT AS AMENDED UP TO 1920

Whereas it is expedient to provide for the segregation and medical treatment of pauper lepers and the control of lepers following certain callings; It is hereby enacted as follows :—

1. (1) This Act may be called the Lepers (*Amended*) Act.

(2) It extends to the whole of British India, inclusive of British Baluchistan, the Santal Parganas and the Pargana of Spiti; but

(3) It shall not come into force in any part thereof until the Local Government, as hereinafter provided, has declared it applicable thereto.

(4) The Local Government may, by notification in the official Gazette, apply this Act or any part thereof to the whole or any portion of the territories for the time being under its administration.

2. In this Act, unless there is anything repugnant in the subject or context,—

(1) "leper" means any person suffering from any variety of leprosy;

(2) "pauper leper" means a leper—

(a) who publicly solicits alms or exposes or exhibits any sores, wounds, bodily ailment or deformity with the object of exciting charity or of obtaining alms, or

(b) who is at large without any ostensible means of subsistence;

(3) "leper asylum" means a leper asylum appointed under section 3.

(4) "Board" means a Board constituted under section 5; and

(5) "District Magistrate" includes a Chief Presidency Magistrate.

3. The Local Government may, by notification in the official Gazette, appoint any place to be a leper asylum,

if it is satisfied that adequate arrangements have been made or will be made for the accommodation and medical treatment of lepers therein, and may by a like notification specify the local areas from which lepers may be sent to such asylum.

4. Subject to any rules which may be made under section 16, the Local Government may appoint any Medical Officer of the Government or other qualified Medical man to be an Inspector of Lepers and any person to be a Superintendent of a Leper Asylum, with such establishment as may, in its opinion, be necessary, and every Inspector or Superintendent so appointed shall be deemed to be a public servant.

5. The Local Government shall constitute for every leper asylum appointed under section 3 a Board consisting of not less than three members, one of whom at least shall be a Medical Officer of the Government.

6. (1) Within any local area which has been specified under section 3 any police-officer *or any other person specially empowered by the Local Government by order in writing in this behalf* may arrest without warrant any person who appears to him to be a pauper leper.

(2) Such police-officer *or other person* shall forthwith take or send the person so arrested to the nearest convenient police-station.

7. Every person brought to a police-station under the last foregoing section shall, without unnecessary delay, be taken before an Inspector of Lepers, who—

(a) if he finds that such person is not a leper within the meaning of section 2, shall give him a certificate in Form A set forth in the schedule, whereupon such person shall be forthwith released from arrest ;

(b) if he finds that such person is a leper within the meaning of section 2, shall give to the police-officer, in whose custody the leper is, a certificate in Form B set forth in the schedule, whereupon the leper shall, without unnecessary delay, be taken before a Magistrate having jurisdiction under this Act.

8. (1) If it appears to any Presidency Magistrate or Magistrate of the first class or to any other Magistrate authorised in this behalf by the Local Government, upon the certificate in Form B set forth in the schedule, that any person is a leper, and if it further appears to the Magistrate that the person is a pauper leper, he may, after recording the evidence on the above-mentioned points, and his order thereon, send the pauper leper in charge of a police-officer, together with an order in Form C set forth in the schedule, to a leper asylum, where such leper shall be detained until discharged by order of the Board or the District Magistrate :

Provided that, if the person denies the allegation of leprosy, the Magistrate shall call and examine the Inspector of Lepers, and shall take such further evidence as may be necessary to support or to rebut the allegation that the person is a leper, and may for this purpose adjourn the enquiry from time to time, remanding the person for observation or for other reason to such place as may be convenient, or admitting him to bail :

Provided also that if any friend or relative of any person found to be a pauper leper shall undertake in writing to the satisfaction of the Magistrate that such pauper leper shall be properly taken care of and shall be prevented from publicly begging in any area specified under section 3, the Magistrate, instead of sending the leper to an asylum, may make the leper over to the care of such friend or relative, requiring him, if he thinks fit, to enter into a bond with one or more sureties, to which the provisions of section 514 of the Code of Criminal Procedure shall be applicable.

(2) If the Magistrate finds that such person is not a leper, or that, if a leper, he is not a pauper leper, he shall forthwith discharge him.

9. (1) The Local Government may, by notification in the official Gazette, order that no leper shall, within any area specified under section 3,—

- (a) personally prepare for sale or sell any article of food or drink or any drugs or clothing intended for human use ; or
- (b) bathe, wash clothes, or take water from any

public well or tank debarred by any municipal or local bye-law from use by lepers ; or

(c) drive, conduct or ride in any public carriage plying for hire other than a railway carriage ; or

(d) exercise any trade or calling which may by such notification be prohibited to lepers.

(2) Any such notification may comprise all or any of the above prohibitions.

(3) Whoever disobeys any order made pursuant to the powers conferred by this section shall be punishable with fine which may extend to twenty rupees :

Provided that, when any person is accused of an offence under this section, the Magistrate before whom he is accused shall cause him to be examined by an Inspector of Lepers, and shall not proceed with the case unless such Inspector furnishes a certificate, in Form B set forth in the schedule in respect of such person.

10. (1) Whenever any leper who has been convicted of an offence punishable under the last foregoing section is again convicted of any offence punishable under that section, the Magistrate may, in addition to, or in lieu of, any punishment to which such leper may be liable, require him to enter into a bond, with one or more sureties, binding him to depart forthwith from the local area specified under section 3 in which he is, and not to enter that or any other local area so specified until an Inspector of Lepers shall have given him a certificate in Form A set forth in the schedule.

(2) If any such leper fails to furnish any security required under sub-section (1), the Magistrate may send him in charge of a police-officer, with an order in Form D set forth in the schedule, to a leper asylum, where such leper shall be detained until discharged by order of the Board or the District Magistrate.

(3) The powers conferred by this section shall only be exercised by a Presidency Magistrate or Magistrate of the first class.

11. Any person who, within any area specified under section 3, knowingly employs a leper in any trade or calling

prohibited by order under section 9 shall be punishable with fine which may extend to fifty rupees :

Provided that the alleged leper shall be produced before the Magistrate and the Magistrate shall cause him to be examined by an Inspector of Lepers, and shall not proceed with the case unless such Inspector furnishes a certificate in Form B set forth in the schedule in respect of such alleged leper.

12. Whoever, having been sent to a leper asylum under an order of a Magistrate in Form C or Form D set forth in the schedule escapes from, or leaves, the asylum without the permission in writing of the Superintendent thereof, may be arrested *without a warrant by any police-officer or by any other person specially empowered by the Local Government by order in writing in this behalf*, and upon arrest shall be forthwith taken back to the leper asylum.

13. Two or more members of the Board, one of whom shall be the Medical Officer, shall, once at least in every three months, together inspect the leper asylum for which they are constituted, and see and examine (a) every leper therein, admitted since the last inspection, together with the order for his admission, and (b) as far as circumstances will permit, every other leper therein, and shall enter in a book to be kept for the purpose any remarks which they may deem proper in regard to the management and condition of the asylum and the lepers therein.

14. Any two members of the Board, one of whom shall be the Medical Officer, may at any time, by an order in writing in Form E set forth in the schedule and signed by them, direct the discharge from the leper asylum of any leper detained therein under the provisions of this Act.

15. Any person, other than a pauper leper, in respect of whom an Inspector of Lepers has issued a certificate, in Form B set forth in the schedule, declaring him to be a leper, or has refused to issue a certificate in Form A set forth in the schedule, may appeal against the issue or refusal of any such certificate to such officer as may be appointed by the Local Government in this behalf, and the decision of such officer shall be final.

16. The Local Government may, by notification in the official Gazette, make rules generally for carrying out the purposes of this Act, and in particular—

- (a) for the guidance of all or any of the officers discharging any duty under this Act; and
- (b) for the management of, and the maintenance of discipline in, a leper asylum.

17. Notwithstanding anything in any enactment with respect to the purposes to which the funds or other property of a local authority may be applied, any local authority may—

- (a) establish or maintain, or establish and maintain, or contribute towards the cost of the establishment or maintenance or the establishment and maintenance of, a leper asylum either within or without the local limits of such local authority;
- (b) with the previous sanction of the Local Government and subject to such conditions as that Government may prescribe, appropriate any immovable property vested in, or under the control of, such body, as a site for, or for use as, a leper asylum.

18. No suit, prosecution or other legal proceeding shall lie against any officer or person in respect of anything in good faith done or intended to be done under, or in pursuance of, the provisions of this Act.

[19. The Governor-General in Council may, by notification in the Gazette of India, direct that any leper or class of lepers, with respect to whom an order for segregation and medical treatment has been made by a Magistrate having jurisdiction within the territories of any Native Prince or State in India, may be sent to any leper asylum specified in such order; and thereupon the provisions of this Act and of any rules made thereunder shall, with such modifications not affecting the substance as may be reasonable and necessary to adapt them to the subject-matter, apply to any leper sent to a leper asylum in pursuance of such notification as though he had been sent by the order of a Magistrate having jurisdiction under this Act.]

APPENDIX B

PUNJAB (2,727 lepers)		U.P. (12,647 lepers)		B. & O. (12,269 lepers)	
Asylum	No. of Inmates	Asylum	No. of Inmates	Asylum	No. of Inmates
Ambala ..	65	Chandag ..	55	Bhagalpur ..	117
Palampur ..	22	Meerut ..	64	Cuttack ..	166
Rawalpindi ..	78	Naini ..	257	Lojardaga ..	11
Subathu ..	98	Rurki ..	42	Muzaffarpur ..	45
T. Taran ..	195	Almora ..	65	Purulia ..	619
Chamba ..	12	Moradabad ..	18	Mourbhanj ..	80
		Saharanpur ..	37	Gaya ..	169
		Agra ..	38	Puri ..	50
		D. Dun ..	23	Deoghar ..	65
		Lucknow ..	28		
		Benares ..	15		
		Budaun ..	15		
		Garhwal ..	25		
		Tehri ..	20		
	470		802		1,322

BENGAL (15,897 lepers)		C. P. (8,025 lepers)		BOMBAY (9,709 lepers)	
Asylum	No. of Inmates	Asylum	No. of Inmates	Asylums	No. of Inmates
Bankura ..	150	Champa ..	405	Belgaum ..	19
Raniganj ..	184	Chandkuri ..	465	Miraj ..	108
Calcutta (Gobra) ..	315	Dhamtari ..	210	Nasik ..	120
		Kothara ..	27	Pui ..	52
		Mungeli ..	111	Poladpur ..	101
		Patpara ..	15	Poona ..	80
		Raipur ..	59	Sholapur ..	53
		Rajnandgaon ..	81	Tarapur ..	19
		Sarangarh ..	?	Vengurla ..	36
				Ahmedabad ..	68
				Karachi ..	49
				Matunga ..	293
				Ratnagiri ..	76
				Trombay ..	17
	649		1,373		1,091

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MADRAS (15,753 lepers)			BURMA (9,765 lepers)			ASSAM (4,464 lepers)		
Asylum	No. of Inmates		Asylum	No. of Inmates		Asylum	No. of Inmates	
Calicut ..	113		Mandalay	142		Kangkopki ..	7	
Manamadura ..	134		Maulmein ..	41		Kohima ..	18	
Ramachandrapuram ..	91		Rangoon ..	128		Sylhet ..	44	
Salur ..	92		Mandalay (R.C.) ..	245				
Vizianagram ..	80							
Vadathorasalur ?								
Kodur ..	25							
Madras ..	329							
Mangalore ..	41							
Kumbakonam	9							
Bapatla ..	65							
	979			556			69	

The numbers in brackets are the numbers of lepers given, for each Province, in the 1921 Census.

TOTALS :

Asylums					No. of Inmates
Punjab	6	..	..	..	470
U.P.	14	..	..	..	802
B. & O.	9	..	..	..	1,322
Bengal	3	..	..	..	649
C.P.	9	..	..	..	1,373
Bombay	14	..	..	..	1,091
Madras	11	..	..	..	979
Burma	4	..	..	..	556
Assam	3	..	..	..	69
Asylums	73		Inmates		7,311

APPENDIX C

ALL-INDIA CONFERENCE ON THE LEPER PROBLEM

The most representative Leper Conference yet held in India met in Calcutta early in February 1920. It was convened by the Mission to Lepers and was a Conference of experts. The delegates were as follows :—

- 40 Honorary Superintendents and workers in Leper Asylums.
- 6 Medical Missionaries connected with work among lepers.
- 3 Secretaries of the Mission to Lepers.
- 5 Government and Official delegates.

The Government of India appointed Lt.-Col. Sir Leonard Rogers, I.M.S., and Lt.-Col. F. H. G. Hutchinson, I.M.S. (Sanitary Commissioner with the Government of India) as its delegates. The Government of Bengal sent Major N. P. Sinha, I.M.S., and the Government of Bombay Dr. Rodrigues. Many important questions were discussed and the following findings were adopted by the Conference at its closing Session :—

1. That the Conference of Leper Asylum Superintendents now assembled in Calcutta adopt the unanimous findings of the special Medical Sub-Committee, which are as follows :

- (1) That leprosy is contagious, but slowly, with a long incubation period, through the escape of the causative bacillus in the nasal discharges of the majority of cases, which include many early cases having no outwardly visible ulceration, and to a less extent from open sores.
- (2) That the disease is not directly hereditary, children being free from actual infection at birth, but that they are specially susceptible to contagion from an early age, children as a class being more susceptible than adults. These facts necessitate the earliest possible separation of infants and children from infected leper parents.

- (3) That in view of the preceding opinions segregation is the most effective measure for reducing the prevalence of leprosy, and the grave danger to the community of unrestricted association with lepers.
- (4) That the Committee therefore unanimously endorse the Memorandum regarding the amendment of the Indian Lepers Act of 1898 which has been submitted by the Indian Auxiliary of the Mission to Lepers to the Government of India.
- (5) That the Committee recommend that steps be taken to provide facilities for the training of medical assistants in the diagnosis and in the treatment of leprosy to enable the best methods to be more generally used in asylums, and also in hospitals and dispensaries, as the majority of the more amenable earlier cases will for a long time to come be most easily and economically dealt with in the latter institutions. Leper institutions should be provided with facilities for microscopical examinations.
- (6) That the Committee are of the opinion that, in view of the considerable degree of fecundity of lepers, especially of females, and the excessive danger of contagion to the children of lepers, which play a great part in maintaining the prevalence of the disease, the separation of the sexes is desirable as far as possible. Whenever this is not found to be practicable, married lepers should only be allowed to live together on the express understanding that any children born to them shall be separated from their infected parents at the earliest possible age. The Committee also consider that it is especially desirable to separate patients presenting good prospects of recovery under efficient treatment to eliminate the risk of the healthy mate becoming infected while the partner is undergoing treatment.
- (7) That the method of treatment with the salts of fatty acids introduced by Lieutenant-Colonel Sir

Leonard Rogers, I.M.S., has been lately tested by fourteen medical officers and assistants in leper asylums throughout India with most favourable results, 72 per cent. showing marked improvement in spite of the fact that most of the cases were advanced and the period of treatment had been comparatively short. More research is needed, however, further to improve the treatment. In view of the international importance of research in connection with leprosy, carried on in India, an application be made to the International Health Commission for a grant towards this work.

2. That the Conference consider that legislation should be primarily concerned with pauper lepers, as these are the greatest menace to public health.

3. That as far as possible segregation should be of a voluntary character as is now carried out in the asylums of the Mission to Lepers, except as is hereinafter recommended in the case of pauper lepers under the Act.

4. That it is our considered opinion that the present type of Mission Asylums, with sympathetic Christian management, affords the best means of effecting a voluntary segregation of lepers.

5. That we further consider that where the compulsory segregation of large numbers of pauper lepers becomes necessary, this might be brought about by the establishment of suitable settlements for the care of this class of people.

6. That no amendment of the Lepers Act in itself, or the establishment of leper settlements, will be of any real value unless the provisions of the Act are strictly enforced.

7. That in the case of voluntary institutions now notified under the Act, the provision of detention wards is not desirable.

8. That the Conference reaffirm the principle that segregation of the sexes should be maintained in all Mission asylums except under exceptional circumstances, and that the marriage of lepers in Mission asylums is not desirable.

9. That the Conference recommend that great care be

observed in the selection of sites for new asylums and in the arrangements for water supply and drainage, and that where necessary expert advice should be obtained ; also that it is desirable and economical to erect buildings of substantial construction and of an approved type according to local requirements.

10. That in conclusion, it is the opinion of the Conference that the disease of leprosy could be stamped out in India if all lepers were segregated, but, as this does not appear to be practicable at this time, it strongly urges that the first step to be taken in this direction is the segregation of all pauper lepers.

APPENDIX D

THE BRITISH EMPIRE LEPROSY RELIEF ASSOCIATION

Patron : H.R.H. THE PRINCE OF WALES, K.G.

Vice-Presidents :

THE SECRETARY OF STATE FOR FOREIGN AFFAIRS.

THE SECRETARY OF STATE FOR THE COLONIES.

THE SECRETARY OF STATE FOR INDIA.

H.E. THE VICEROY OF INDIA.

H.E. THE GOVERNOR-GENERAL OF CANADA.

H.E. THE GOVERNOR-GENERAL OF SOUTH AFRICA.

H.E. THE GOVERNOR-GENERAL OF NEW ZEALAND.

General Committee :

VISCOUNT CHELMSFORD, P.C., G.C.S.I., G.C.I.E., G.C.M.G.,
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Office—24, Cavendish Square, London, W.1.

300,000 LEPERS IN THE EMPIRE

Objects of the Association

To stamp out Leprosy in the Empire by working with existing and other agencies in :

Providing the latest curative treatment ;

Housing homeless and destitute lepers ;

Research work ; the collection and publication of information, etc.

POINTS TO BE NOTED

LEPERS ARE NOW BEING CURED.

LEPROSY IS NOT HEREDITARY.

LEPROSY *CAN* BE STAMPED OUT.

£250,000 NEEDED

£1 will give a leper a chance of recovery.

LEPERS IN THE EMPIRE

The Estimated Number of Lepers in the British Empire is
300,000.

Country.	No. of Lepers.
India	200,000
West African Possessions	50,000
East African Possessions	30,000
South Africa	3,600
Federated Malay States	1,200
West Indies	1,050
Ceylon.. .. .	600
Mauritius	550
British Guiana	400
Fiji	350
Malta	120
British North Borneo	100
Australia	80
Cyprus	75
United Kingdom	50
Canada	20
New Zealand	3

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